

enriched GO terms of increased proteins (biological process)

GO Term	Description	P-value	FDR q-value	Enrichment	N	B	n	b	Genes
GO:0072376	protein activation cascade	5.01E-20	5.7E-16	20,17	4935	26	160	17	[Igkc - immunoglobulin kappa constant, Krt1 - keratin 1, C3 - complement component 3, C4b - complement component 4b (chido blood group), Fn1 - fibronectin 1, Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Apoh - apolipoprotein h, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Ig hm - immunoglobulin heavy constant mu, Cf h - complement component factor h, Fgb - fibrinogen beta chain]
GO:0006959	humoral immune response	5.1E-16	2.9E-12	14,95	4935	33	160	16	[C3 - complement component 3, Krt1 - keratin 1, Igkc - immunoglobulin kappa constant, C4b - complement component 4b (chido blood group), Cf b - complement factor b, C1qc - complement component 1, q subcomponent, c chain, F2 - coagulation factor ii, C1qa - complement component 1, q subcomponent, alpha polypeptide, Hrg - histidine-rich glycoprotein, C1qb - complement component 1, q subcomponent, beta polypeptide, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Ig hm - immunoglobulin heavy constant mu, Cf h - complement component factor h, Fgb - fibrinogen beta chain]
GO:0052547	regulation of peptidase activity	2.45E-15	9.28E-12	6,12	4935	141	160	28	[Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Gsn - gelsolin, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Lgmn - legumain, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ctsd - cathepsin d, Kng1 - kininogen 1, Hrg - histidine-rich glycoprotein, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Ddrgk1 - ddrgk domain containing 1, Vtn - vitronectin, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Pcd5 - programmed cell death 5, Ncstn - nicastrin, Mug1 - murinoglobulin 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]
GO:0002376	immune system process	8.95E-15	2.55E-11	3,78	4935	343	160	42	[Scg2 - secretogranin ii, Anxa3 - annexin a3, Plg - plasminogen, Aif1 - allograft inflammatory factor 1, Lcp1 - lymphocyte cytosolic protein 1, Ig m member 1, Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cf h - complement component factor h, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, C3 - complement component 3, Krt1 - keratin 1, Igkc - immunoglobulin kappa constant, H2-D1 - histocompatibility 2, d region locus 1, C4b - complement component 4b (chido blood group), Itgam - integrin alpha m, Lgals1 - lectin, galactose binding, soluble 1, Hp - haptoglobin, Cf b - complement factor b, C1qc - complement component 1, q subcomponent, c chain, Itga6 - integrin alpha 6, F2 - coagulation factor ii, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Hrg - histidine-rich glycoprotein, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Vtn - vitronectin, Itgb2 - integrin beta 2, Gba - glucosidase, beta, acid, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Ampd3 - adenosine monophosphate deaminase 3, Ig hm - immunoglobulin heavy constant mu, Ncstn - nicastrin, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen, Stat1 - signal transducer and activator of transcription 1]
GO:0006956	complement activation	1.4E-14	3.2E-11	20,56	4935	18	160	12	[Igkc - immunoglobulin kappa constant, Krt1 - keratin 1, C3 - complement component 3, C4b - complement component 4b (chido blood group), Cf b - complement factor b, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), C1qc - complement component 1, q subcomponent, c chain, Ig hm - immunoglobulin heavy constant mu, Cf h - complement component factor h, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide]
GO:0030162	regulation of proteolysis	1.13E-13	2.14E-10	4,07	4935	273	160	36	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Pzp - pregnancy zone protein, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Gsn - gelsolin, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Fhit - fragile histidine triad gene, Cf h - complement component factor h, Ctsd - cathepsin d, Kng1 - kininogen 1, Ide - insulin degrading enzyme, C3 - complement component 3, F2 - coagulation factor ii, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Hrg - histidine-rich glycoprotein, Ddrgk1 - ddrgk domain containing 1, Vtn - vitronectin, Gba - glucosidase, beta, acid, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Pcd5 - programmed cell death 5, Clu - clusterin, Ncstn - nicastrin, Commd1 - comm domain containing 1, Stat3 - signal transducer and activator of transcription 3, Mug1 - murinoglobulin 1, Stat1 - signal transducer and activator of transcription 1]
GO:0010466	negative regulation of peptidase activity	1.36E-12	2.21E-9	7,71	4935	76	160	19	[Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Mug1 - murinoglobulin 1, Kng1 - kininogen 1]

GO:0006952	defense response	2.8E-12	3.99E-9	4,36	4935 212 160 30	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Anxa3 - annexin a3, Ahsg - alpha-2-hs-glycoprotein, Fn1 - fibronectin 1, Cst3 - cystatin c, Irgm1 - immunity-related gtpase family m member 1, Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cfh - complement component factor h, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, C3 - complement component 3, Igkc - immunoglobulin kappa constant, Krt1 - keratin 1, Hp - haptoglobin, Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, F2 - coagulation factor ii, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Hrg - histidine-rich glycoprotein, Ighg2b - immunoglobulin heavy constant gamma 2b, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Orm1 - orosomucoid 1, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Ig hm - immunoglobulin heavy constant mu, Stat3 - signal transducer and activator of transcription 3, Tspan2 - tetraspanin 2, Stat1 - signal transducer and activator of transcription 1]		
GO:0045861	negative regulation of proteolysis	7.43E-12	9.39E-9	5,59	4935 127 160 23	[Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, F2 - coagulation factor ii, Cst3 - cystatin c, Hrg - histidine-rich glycoprotein, Ddrhk1 - ddrhk domain containing 1, Vtn - vitronectin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Fhit - fragile histidine triad gene, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Mug1 - murinoglobulin 1, Kng1 - kininogen 1, Ide - insulin degrading enzyme]		
GO:0002252	immune effector process	1.61E-11	1.83E-8	6,36	4935 97 160 20	[Krt1 - keratin 1, Igkc - immunoglobulin kappa constant, C3 - complement component 3, Anxa3 - annexin a3, Lgals1 - lectin, galactose binding, soluble 1, C4b - complement component 4b (chido blood group), Cf b - complement factor b, C1qc - complement component 1, q subcomponent, c chain, F2 - coagulation factor ii, Lcp1 - lymphocyte cytosolic protein 1, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Clu - clusterin, Cf h - complement component factor h, Stat1 - signal transducer and activator of transcription 1]		
GO:0032101	regulation of response to external stimulus	5.73E-11	5.93E-8	3,89	4935 238 160 30	[Scg2 - secretogranin ii, Plg - plasminogen, Fn1 - fibronectin 1, Ahsg - alpha-2-hs-glycoprotein, Aif1 - allograft inflammatory factor 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Apod - apolipoprotein d, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cf h - complement component factor h, Sod1 - superoxide dismutase 1, soluble, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, C3 - complement component 3, Krt1 - keratin 1, Fabp7 - fatty acid binding protein 7, brain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Tgm2 - transglutaminase 2, c polypeptide, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Apoa1 - apolipoprotein a-i, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2]		
GO:0006955	immune response	1.93E-10	1.83E-7	4,79	4935 148 160 23	[C3 - complement component 3, Krt1 - keratin 1, Igkc - immunoglobulin kappa constant, H2-D1 - histocompatibility 2, d region locus 1, C4b - complement component 4b (chido blood group), Cf b - complement factor b, C1qc - complement component 1, q subcomponent, c chain, F2 - coagulation factor ii, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Ig hm1 - immunity-related gtpase family m member 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Cf h - complement component factor h, Stat3 - signal transducer and activator of transcription 3, Fgb - fibrinogen beta chain]		
GO:0042730	fibrinolysis	2.58E-10	2.26E-7	26,99	4935 8 160 7	[Plg - plasminogen, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Anxa2 - annexin a2]		
GO:0052548	regulation of endopeptidase activity	2.88E-10	2.34E-7	5,18	4935 125 160 21	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Gsn - gelsolin, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Lgmn - legumain, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Pcd5 - programmed cell death 5, Ncstn - nicastrin, Ctsd - cathepsin d, Stat3 - signal transducer and activator of transcription 3, Kng1 - kininogen 1, Stat1 - signal transducer and activator of transcription 1]		
GO:0002684	positive regulation of immune system process	4.26E-10	3.23E-7	3,95	4935 211 160 27	[Aif1 - allograft inflammatory factor 1, Lamp1 - lysosomal-associated membrane protein 1, Ig hm1 - immunity-related gtpase family m member 1, Lgmn - legumain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cf h - complement component factor h, Igkc - immunoglobulin kappa constant, Krt1 - keratin 1, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Lgals1 - lectin, galactose binding, soluble 1, Itgam - integrin alpha m, C4b - complement component 4b (chido blood group), Cf b - complement factor b, C1qc - complement component 1, q subcomponent, c chain, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Hrg - histidine-rich glycoprotein, Ig hg3 - integrin beta 3, Ig gb2 - integrin beta 2, Hpx - hemopexin, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Ig hm - immunoglobulin heavy constant mu, IRS2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]		

GO:0050817	coagulation blood	4.49E-10	3.19E-7	14,02	4935 22	160 10	[C3 - complement component 3, Apoh - apolipoprotein h, Plg - plasminogen, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Kng1 - kininogen 1]	
GO:0007596	coagulation	4.49E-10	3.00E-07	14,02	4935 22	160 10	[C3 - complement component 3, Apoh - apolipoprotein h, Plg - plasminogen, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Kng1 - kininogen 1, Fgb - fibrinogen beta chain]	
GO:0007599	hemostasis negative regulation of hemostasis	7.72E-10	4.88E-7	13,41	4935 23	160 10	[C3 - complement component 3, Apoh - apolipoprotein h, Plg - plasminogen, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Kng1 - kininogen 1]	
GO:1900047	negative regulation of blood coagulation	1.2E-9	7.18E-7	15,42	4935 18	160 9	[Apoh - apolipoprotein h, Plg - plasminogen, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, Anxa2 - annexin a2]	
GO:0030195	negative regulation of coagulation	1.2E-9	6.82E-7	15,42	4935 18	160 9	[Apoh - apolipoprotein h, Plg - plasminogen, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Kng1 - kininogen 1, Anxa2 - annexin a2]	
GO:0050819	acute inflammatory response	1.2E-9	6.49E-7	15,42	4935 18	160 9	[Apoh - apolipoprotein h, Plg - plasminogen, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, Anxa2 - annexin a2]	
GO:0002526	complement activation, classical pathway	2.61E-9	1.35E-6	17,62	4935 14	160 8	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Ahsg - alpha-2-hs-glycoprotein, Fn1 - fibronectin 1, Hp - haptoglobin, Orm1 - orosomucoid 1, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), F2 - coagulation factor ii, Stat3 - signal transducer and activator of transcription 3]	
GO:0006958		2.61E-9	1.29E-6	17,62	4935 14	160 8	[Igkc - immunoglobulin kappa constant, C3 - complement component 3, Iggb2b - immunoglobulin heavy constant gamma 2b, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), C1qc - complement component 1, q subcomponent, c chain, Ighm - immunoglobulin heavy constant mu, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide]	
GO:1900046	regulation of hemostasis	3.09E-9	1.46E-6	10,28	4935 33	160 11	[Apoh - apolipoprotein h, Plg - plasminogen, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Hrg - histidine-rich glycoprotein, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, Anxa2 - annexin a2]	
GO:0030193	regulation of blood coagulation	3.09E-9	1.4E-6	10,28	4935 33	160 11	[Apoh - apolipoprotein h, Plg - plasminogen, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Kng1 - kininogen 1, Anxa2 - annexin a2]	
GO:0051336	regulation of hydrolase activity	3.19E-9	1.4E-6	2,82	4935 405	160 37	[Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Gsn - gelsolin, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Apoh - apolipoprotein h, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Lgmn - legumain, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ctsd - cathepsin d, Sod1 - superoxide dismutase 1, soluble, Kng1 - kininogen 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itga6 - integrin alpha 6, Arhgap22 - rho gtpase activating protein 22, Hrg - histidine-rich glycoprotein, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Ddrkg1 - ddrkg domain containing 1, Vtn - vitronectin, Tpm1 - tropomyosin 1, alpha, Scarb2 - scavenger receptor class b, member 2, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpina1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Pcd5 - programmed cell death 5, Ncstn - nicastrin, Apoa1 - apolipoprotein a-i, Mug1 - murinoglobulin 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]	
GO:0002682	regulation of immune system process	3.25E-9	1.37E-6	3,07	4935 332	160 33	[Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Lamp1 - lysosomal-associated membrane protein 1, Apod - apolipoprotein d, Lgmn - legumain, Irgm1 - immunity-related gtpase family m member 1, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cfh - complement component factor h, C3 - complement component 3, Igkc - immunoglobulin kappa constant, Krt1 - keratin 1, H2-D1 - histocompatibility 2, d region locus 1, C4b - complement component 4b (chido blood group), Lgals1 - lectin, galactose binding, soluble 1, Itgam - integrin alpha m, Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Hrg - histidine-rich glycoprotein, Itgb3 - integrin beta 3, Rbp1 - retinol binding protein 1, cellular, Itgb2 - integrin beta 2, Hpx - hemopexin, Orm1 - orosomucoid 1, Iggb2b - immunoglobulin heavy constant gamma 2b, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Iggb - immunoglobulin heavy constant mu, Apoa1 - apolipoprotein a-i, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]	
GO:0006953	acute-phase response	3.66E-9	1.49E-6	21,59	4935 10	160 7	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Ahsg - alpha-2-hs-glycoprotein, Fn1 - fibronectin 1, Hp - haptoglobin, Orm1 - orosomucoid 1, F2 - coagulation factor ii, Stat3 - signal transducer and activator of transcription 3]	

GO:0006911	phagocytosis, engulfment	4.14E-8	1.27E-5	11,10	4935 25	160 9	[Igkc - immunoglobulin kappa constant, Itgam - integrin alpha m, Ighg2b - immunoglobulin heavy constant gamma 2b, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Aif1 - allograft inflammatory factor 1, Igdm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Gsn - gelsolin, Itgb2 - integrin beta 2]
GO:0045087	innate immune response	4.24E-8	1.27E-5	5,19	4935 95	160 16	[Igkc - immunoglobulin kappa constant, C3 - complement component 3, Krt1 - keratin 1, Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig dm1 - immunity-related gtpase family m member 1, Fga - fibrinogen alpha chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig dm - immunoglobulin heavy constant mu, Cf h - complement component factor h, Fgb - fibrinogen beta chain]
GO:0050878	regulation of body fluid levels	4.3E-8	1.25E-5	5,57	4935 83	160 15	[Wfs1 - wolfram syndrome 1 homolog (human), C3 - complement component 3, Krt1 - keratin 1, Plg - plasminogen, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Gba - glucosidase, beta, acid, Apoh - apolipoprotein h, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, Anxa2 - annexin a2]
GO:0008284	positive regulation of cell proliferation	6.03E-8	1.71E-5	3,35	4935 230	160 25	[Scg2 - secretogranin ii, Fn1 - fibronectin 1, Mvd - mevalonate (diphospho)decarboxylase, Aif1 - allograft inflammatory factor 1, Cst3 - cystatin c, Flna - filamin, alpha, Lgmn - legumain, Crip2 - cysteine rich protein 2, Marcks1l - marcks-like 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, F2 - coagulation factor ii, S100a13 - s100 calcium binding protein a13, Ddrkg1 - ddrkg domain containing 1, Itgb3 - integrin beta 3, Ybx1 - y box protein 1, Tgm1 - transglutaminase 1, k polypeptide, Tgm2 - transglutaminase 2, c polypeptide, Gfap - glial fibrillary acidic protein, Ig dm - immunoglobulin heavy constant mu, Irs2 - insulin receptor substrate 2, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2]
GO:0080134	regulation of response to stress	6.74E-8	1.87E-5	2,56	4935 433	160 36	[Wfs1 - wolfram syndrome 1 homolog (human), Plg - plasminogen, Ahsg - alpha-2-hs-glycoprotein, Lamp1 - lysosomal-associated membrane protein 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Apod - apolipoprotein d, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Ig dm1 - immunity-related gtpase family m member 1, P4hb - prolyl 4-hydroxylase, beta polypeptide, Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cf h - complement component factor h, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Kng1 - kininogen 1, Krt1 - keratin 1, C3 - complement component 3, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Ddrkg1 - ddrkg domain containing 1, Ybx1 - y box protein 1, Hpx - hemopexin, Tgm2 - transglutaminase 2, c polypeptide, Ig hg2b - immunoglobulin heavy constant gamma 2b, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Clu - clusterin, Apoa1 - apolipoprotein a-i, Commd1 - comm domain containing 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2]
GO:0010951	negative regulation of endopeptidase activity	6.9E-8	1.87E-5	6,36	4935 63	160 13	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Kng1 - kininogen 1]
GO:0061045	negative regulation of wound healing	8.99E-8	2.38E-5	10,28	4935 27	160 9	[Apoh - apolipoprotein h, Plg - plasminogen, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Kng1 - kininogen 1, Anxa2 - annexin a2]
GO:0002250	adaptive immune response	1.16E-7	2.99E-5	7,54	4935 45	160 11	[Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, C4b - complement component 4b (chido blood group), Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Ig dm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cf h - complement component factor h, Stat3 - signal transducer and activator of transcription 3, Fgb - fibrinogen beta chain]
GO:0048584	positive regulation of response to stimulus	1.23E-7	3.11E-5	2,22	4935 611	160 44	[Plg - plasminogen, Scg2 - secretogranin ii, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Lamp1 - lysosomal-associated membrane protein 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Lgmn - legumain, Ig dm1 - immunity-related gtpase family m member 1, Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cf h - complement component factor h, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Krt1 - keratin 1, Ig kc - immunoglobulin kappa constant, Glipr2 - gli pathogenesis-related 2, C3 - complement component 3, Itgb1 - integrin beta 1 (fibronectin receptor beta), H2-D1 - histocompatibility 2, d region locus 1, Itgam - integrin alpha m, C4b - complement component 4b (chido blood group), Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, F2 - coagulation factor ii, Fabp5 - fatty acid binding protein 5, epidermal, S100a13 - s100 calcium binding protein a13, C1qa - complement component 1, q subcomponent, alpha polypeptide, Hrg - histidine-rich glycoprotein, C1qb - complement component 1, q subcomponent, beta polypeptide, Ddrkg1 - ddrkg domain containing 1, Itgb3 - integrin beta 3, Itgb2 - integrin beta 2, Hpx - hemopexin, Tgm2 - transglutaminase 2, c polypeptide, Ig hg2b - immunoglobulin heavy constant gamma 2b, Fga - fibrinogen alpha chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Ig dm - immunoglobulin heavy constant mu, Clu - clusterin, Pcd5 - programmed cell death 5, Apoa1 - apolipoprotein a-i, Stat3 - signal transducer and activator of transcription 3]

GO:0032102	negative regulation of response to external stimulus	1.58E-7	3.91E-5	4,75	4935	104	160	16	[Krt1 - keratin 1, Plg - plasminogen, Aif1 - allograft inflammatory factor 1, F2 - coagulation factor ii, Fabp7 - fatty acid binding protein 7, brain, Hrg - histidine-rich glycoprotein, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Apoh - apolipoprotein h, Apod - apolipoprotein d, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, ApoA1 - apolipoprotein a-i, Sod1 - superoxide dismutase 1, soluble, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, Anxa2 - annexin a2]					
GO:0065009	regulation of molecular function	1.62E-7	3.92E-5	1,92	4935	917	160	57	[Pzp - pregnancy zone protein, Wfs1 - wolfram syndrome 1 homolog (human), Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Gsn - gelsolin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Apoh - apolipoprotein h, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Kng1 - kininogen 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, Itga6 - integrin alpha 6, F2 - coagulation factor ii, Arhgap22 - rho gtpase activating protein 22, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Vtn - vitronectin, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2, Scarb2 - scavenger receptor class b, member 2, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Igdm - immunoglobulin heavy constant mu, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Irs2 - insulin receptor substrate 2, Nptrx - neuronal pentraxin receptor, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Scn3b - sodium channel, voltage-gated, type iii, beta, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Anxa3 - annexin a3, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Ctsb - cathepsin b, Cst3 - cystatin c, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Ctsd - cathepsin d, Pex19 - peroxisomal biogenesis factor 19, Sod1 - superoxide dismutase 1, soluble, Ide - insulin degrading enzyme, Hp - haptoglobin, Hrg - histidine-rich glycoprotein, Ddrkg1 - ddrkg domain containing 1, Pdc5 - programmed cell death 5, ApoA1 - apolipoprotein a-i, Clu - clusterin, Ncstn - nicastrin, Nptrx2 - neuronal pentraxin 2, Commd1 - comm domain containing 1, Mug1 - murinoglobulin 1]					
GO:0050776	regulation of immune response	1.76E-7	4.18E-5	3,52	4935	193	160	22	[C3 - complement component 3, Igkc - immunoglobulin kappa constant, Krt1 - keratin 1, H2-D1 - histocompatibility 2, d region locus 1, C4b - complement component 4b (chido blood group), Itgam - integrin alpha m, Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Hrg - histidine-rich glycoprotein, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2, Hpx - hemopexin, Ighg2b - immunoglobulin heavy constant gamma 2b, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Irgm1 - immunity-related gtpase family m member 1, Iggh1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Igdm - immunoglobulin heavy constant mu, Cfh - complement component factor h, ApoA1 - apolipoprotein a-i]					
GO:0061041	regulation of wound healing	1.79E-7	4.15E-5	6,49	4935	57	160	12	[Plg - plasminogen, Itgb1 - integrin beta 1 (fibronectin receptor beta), Apoh - apolipoprotein h, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Kng1 - kininogen 1, Anxa2 - annexin a2]					
GO:0051246	regulation of protein metabolic process	2.12E-7	4.83E-5	1,90	4935	924	160	57	[Pzp - pregnancy zone protein, Wfs1 - wolfram syndrome 1 homolog (human), Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Apod - apolipoprotein d, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ctsa - cathepsin a, Kng1 - kininogen 1, Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, F2 - coagulation factor ii, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Vtn - vitronectin, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Igdm - immunoglobulin heavy constant mu, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Fhit - fragile histidine triad gene, Cfhs - complement component factor h, Ctsd - cathepsin d, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, C3 - complement component 3, Hrg - histidine-rich glycoprotein, Ddrkg1 - ddrkg domain containing 1, Hpx - hemopexin, Gfap - glial fibrillary acidic protein, Fga - fibrinogen alpha chain, Pdc5 - programmed cell death 5, ApoA1 - apolipoprotein a-i, Clu - clusterin, Ncstn - nicastrin, Commd1 - comm domain containing 1, Mug1 - murinoglobulin 1]					
GO:0099024	invagination	2.52E-7	5.63E-5	9,25	4935	30	160	9	[Igkc - immunoglobulin kappa constant, Itgam - integrin alpha m, Ighg2b - immunoglobulin heavy constant gamma 2b, Iggh1 - immunoglobulin heavy constant gamma 1 (g1m marker), Aif1 - allograft inflammatory factor 1, Igdm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Gsn - gelsolin, Itgb2 - integrin beta 2]					

GO:0050790	regulation of catalytic activity	3.05E-7	6.68E-5	2,10	4935	675	160	46	1	[Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Ctsb - cathepsin b, Gsn - gelsolin, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Apoh - apolipoprotein h, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Lgmn - legumain, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Ctsd - cathepsin d, Sod1 - superoxide dismutase 1, soluble, Kng1 - kininogen 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, Hp - haptoglobin, Itga6 - integrin alpha 6, F2 - coagulation factor ii, Arhgap22 - rho gtpase activating protein 22, Hrg - histidine-rich glycoprotein, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Ddr4ck1 - ddr4ck domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Gba - glucosidase, beta, acid, Scarb2 - scavenger receptor class b, member 2, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Igdm - immunoglobulin heavy constant mu, Clu - clusterin, Pcdm5 - programmed cell death 5, Irs2 - insulin receptor substrate 2, Apoa1 - apolipoprotein a-i, Ncstrn - nicastrin, Mug1 - murinoglobulin 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]					
GO:0002253	activation of immune response	3.63E-7	7.79E-5	5,57	4935	72	160	13	[Igkc - immunoglobulin kappa constant, Krt1 - keratin 1, C3 - complement component 3, C4b - complement component 4b (chido blood group), Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide, Ighg2b - immunoglobulin heavy constant gamma 2b, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Igdm - immunoglobulin heavy constant mu, Cfh - complement component factor h]						
GO:0002705	positive regulation of leukocyte mediated immunity	4.68E-7	9.86E-5	8,67	4935	32	160	9	[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Itgam - integrin alpha m, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2]						
GO:0006954	inflammatory response	5.95E-7	1.23E-4	5,35	4935	75	160	13	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, C3 - complement component 3, Fn1 - fibronectin 1, Ahsg - alpha-2-hs-glycoprotein, Hp - haptoglobin, F2 - coagulation factor ii, Orm1 - orosomucoid 1, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Cf h - complement component factor h, Tspan2 - tetraspanin 2, Stat3 - signal transducer and activator of transcription 3, Kng1 - kininogen 1]						
GO:0002714	positive regulation of B cell mediated immunity	6.71E-7	1.36E-4	22,03	4935	7	160	5	[C3 - complement component 3, Hpx - hemopexin, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]						
GO:0002891	positive regulation of immunoglobulin mediated immune response	6.71E-7	1.34E-4	22,03	4935	7	160	5	[Hpx - hemopexin, C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]						
GO:0010324	membrane invagination	8.27E-7	1.62E-4	8,16	4935	34	160	9	[Igkc - immunoglobulin kappa constant, Itgam - integrin alpha m, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Aif1 - allograft inflammatory factor 1, Ig dm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Gsn - gelsolin, Itgb2 - integrin beta 2]						
GO:0044092	negative regulation of molecular function	1,00E-06	1.93E-4	2,57	4935	360	160	30	[Wfs1 - wolfram syndrome 1 homolog (human), Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Pex19 - peroxisomal biogenesis factor 19, Kng1 - kininogen 1, Hp - haptoglobin, Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Apoa1 - apolipoprotein a-i, Irs2 - insulin receptor substrate 2, Commd1 - comm domain containing 1, Mug1 - murinoglobulin 1, Anxa2 - annexin a2]						
GO:0001796	hypersensitivity	1.07E-6	2.02E-4	30,84	4935	4	160	4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]						

	positive regulation of type IIa hypersensitivity	1.07E-6	1.99E-4	30,84	4935 4	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0001798	positive regulation of hypersensitivity	1.07E-6	1.96E-4	30,84	4935 4	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002885	regulation of hypersensitivity	1.07E-6	1.96E-4	30,84	4935 4	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002892	positive regulation of type II hypersensitivity	1.07E-6	1.92E-4	30,84	4935 4	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002894	hypersensitivity regulation of	1.07E-6	1.89E-4	30,84	4935 4	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002883	cell-matrix adhesion	1.07E-6	1.86E-4	30,84	4935 4	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0007160		1.08E-6	1.87E-4	7,93	4935 35	160 9	[Itgb1 - integrin beta 1 (fibronectin receptor beta), Fn1 - fibronectin 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Itga6 - integrin alpha 6, Vtn - vitronectin, Itgb3 - integrin beta 3, Fgb - fibrinogen beta chain, Itgb2 - integrin beta 2]
	regulation of biological quality	1.12E-6	1.91E-4	1,64	4935 1358 160 72		[Wfs1 - wolfram syndrome 1 homolog (human), Fn1 - fibronectin 1, Ahsg - alpha-2-hs-glycoprotein, Clic1 - chloride intracellular channel 1, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Stx12 - syntaxis 12, Flna - filamin, alpha, Apoh - apolipoprotein h, P4hb - prolyl 4-hydroxylase, beta polypeptide, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Alb - albumin, Ctsa - cathepsin a, Cpe - carboxypeptidase e, Kng1 - kininogen 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, Cp - ceruloplasmin, F2 - coagulation factor ii, Fabp5 - fatty acid binding protein 5, epidermal, Itgb3 - integrin beta 3, Sh3bgrl3 - sh3 domain binding glutamic acid-rich protein-like 3, Tpm1 - tropomyosin 1, alpha, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2, Rbp1 - retinol binding protein 1, cellular, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Ampd3 - adenosine monophosphate deaminase 3, Irs2 - insulin receptor substrate 2, Npxr - neuronal pentraxin receptor, Stat3 - signal transducer and activator of transcription 3, Arcp1b - actin related protein 2/3 complex, subunit 1b, Stat1 - signal transducer and activator of transcription 1, Scn3b - sodium channel, voltage-gated, type iii, beta, Anxa2 - annexin a2, Plg - plasminogen, Serpin6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Ctsb - cathepsin b, Lamp2 - lysosomal-associated membrane protein 2, Lamp1 - lysosomal-associated membrane protein 1, Anpep - alanyl (membrane) aminopeptidase, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Cfh - complement component factor h, Ttr - transthyretin, Pex19 - peroxisomal biogenesis factor 19, Gaa - glucosidase, alpha, acid, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, C3 - complement component 3, Krt1 - keratin 1, S100a13 - s100 calcium binding protein a13, Hrg - histidine-rich glycoprotein, Kcnj10 - potassium inwardly-rectifying channel, subfamily j, member 10, Ddrkg1 - ddrkg domain containing 1, Hexb - hexosaminidase b, Ybx1 - y box protein 1, Hpx - hemopexin, Tgm2 - transglutaminase 2, c polypeptide, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin)4a, Gfap - glial fibrillary acidic protein, Fga - fibrinogen alpha chain, Ncstn - nicastrin, Apoa1 - apolipoprotein a-i, Car14 - carbonic anhydrase 14, Clu - clusterin, Npxt2 - neuronal pentraxin 2, Txndc5 - thioredoxin domain containing 5, Commd1 - comm domain containing 1]
GO:0065008	negative regulation of catalytic activity	1.17E-6	1.96E-4	2,96	4935 250 160 24		[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Pzp - pregnancy zone protein, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Hp - haptoglobin, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Gba - glucosidase, beta, acid, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpina1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Apoa1 - apolipoprotein a-i, Irs2 - insulin receptor substrate 2, Mug1 - murinoglobulin 1, Kng1 - kininogen 1]
GO:0043086	regulation of response to wounding	1.29E-6	2.12E-4	5,01	4935 80 160 13		[Itgb1 - integrin beta 1 (fibronectin receptor beta), Plg - plasminogen, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Flna - filamin, alpha, Apoh - apolipoprotein h, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, Anxa2 - annexin a2]
GO:1903034	defense response to bacterium	1.4E-6	2.28E-4	7,71	4935 36 160 9		[Igkc - immunoglobulin kappa constant, Anxa3 - annexin a3, Hp - haptoglobin, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Ig hm - immunoglobulin heavy constant mu, Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Fgb - fibrinogen beta chain]

GO:1903035	negative regulation of response to wounding	1.4E-6	2.25E-4	7,71	4935 36	160 9	[Apoh - apolipoprotein h, Plg - plasminogen, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain, Kng1 - kininogen 1, Anxa2 - annexin a2]
GO:0032103	positive regulation of response to external stimulus	1.48E-6	2.33E-4	4,59	4935 94	160 14	[C3 - complement component 3, Scg2 - secretogranin ii, Plg - plasminogen, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Hrg - histidine-rich glycoprotein, Flna - filamin, alpha, Tgm2 - transglutaminase 2, c polypeptide, Apoh - apolipoprotein h, Ighg2b - immunoglobulin heavy constant gamma 2b, Lgmn - legumain, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Stat3 - signal transducer and activator of transcription 3]
GO:0051707	response to other organism	1.73E-6	2.69E-4	4,24	4935 109	160 15	[Igkc - immunoglobulin kappa constant, C3 - complement component 3, Anxa3 - annexin a3, Hp - haptoglobin, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Irgm1 - immunity-related gtpase family m member 1, Ighg2b - immunoglobulin heavy constant gamma 2b, Fga - fibrinogen alpha chain, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ighm - immunoglobulin heavy constant mu, Stat1 - signal transducer and activator of transcription 1, Fgb - fibrinogen beta chain, Ces1c - carboxylesterase 1c]
GO:0098883	synapse pruning cell adhesion mediated by integrin	1.74E-6	2.68E-4	19,28	4935 8	160 5	[C3 - complement component 3, Itgam - integrin alpha m, C1qc - complement component 1, q subcomponent, c chain, C1qa - complement component 1, q subcomponent, alpha polypeptide, C1qb - complement component 1, q subcomponent, beta polypeptide]
GO:0033627	response to external biotic stimulus	1.74E-6	2.64E-4	19,28	4935 8	160 5	[Itgb1 - integrin beta 1 (fibronectin receptor beta), Itga6 - integrin alpha 6, Vtn - vitronectin, Itgb3 - integrin beta 3, Itgb2 - integrin beta 2]
GO:0043207	negative regulation of multicellular organismal process	1.77E-6	2.65E-4	3,61	4935 154	160 18	[C3 - complement component 3, Igkc - immunoglobulin kappa constant, Anxa3 - annexin a3, Vim - vimentin, Hp - haptoglobin, F2 - coagulation factor ii, Mgst1 - microsomal glutathione-s-transferase 1, Hrg - histidine-rich glycoprotein, Irgm1 - immunity-related gtpase family m member 1, Ighg2b - immunoglobulin heavy constant gamma 2b, Fga - fibrinogen alpha chain, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ighm - immunoglobulin heavy constant mu, Cfh - complement component factor h, Stat1 - signal transducer and activator of transcription 1, Fgb - fibrinogen beta chain, Ces1c - carboxylesterase 1c]
GO:0051241	positive regulation of lymphocyte mediated immunity	1.79E-6	2.64E-4	2,50	4935 370	160 30	[Plg - plasminogen, Fn1 - fibronectin 1, Ahsg - alpha-2-hs-glycoprotein, Anpep - alanyl (membrane) aminopeptidase, Flna - filamin, alpha, Apoh - apolipoprotein h, Apod - apolipoprotein d, Lgmn - legumain, Fgg - fibrinogen gamma chain, Sod1 - superoxide dismutase 1, soluble, Cpe - carboxypeptidase e, Kng1 - kininogen 1, Fgb - fibrinogen beta chain, Itgb1 - integrin beta 1 (fibronectin receptor beta), H2-D1 - histocompatibility 2, d region locus 1, Lgals1 - lectin, galactose binding, soluble 1, Vim - vimentin, C1qc - complement component 1, q subcomponent, c chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Gba - glucosidase, beta, acid, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Gfap - glial fibrillary acidic protein, Fga - fibrinogen alpha chain, Arhgdib - rho, gdp dissociation inhibitor (gdi) beta, Apoa1 - apolipoprotein a-i, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2]
GO:0002708	regulation of cellular protein metabolic process	1.79E-6	2.62E-4	10,80	4935 20	160 7	[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Ighg2b - immunoglobulin heavy constant gamma 2b, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Lamp1 - lysosomal-associated membrane protein 1]
GO:0032268		1.89E-6	2.72E-4	1,86	4935 861	160 52	[Pzp - pregnancy zone protein, Wfs1 - wolfram syndrome 1 homolog (human), Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Kng1 - kininogen 1, Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, F2 - coagulation factor ii, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Vtn - vitronectin, Itgb3 - integrin beta 3, Itgb2 - integrin beta 2, Gba - glucosidase, beta, acid, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Ighm - immunoglobulin heavy constant mu, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Lgmn - legumain, Fgg - fibrinogen gamma chain, Fhit - fragile histidine triad gene, Ctsd - cathepsin d, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, C3 - complement component 3, Hrg - histidine-rich glycoprotein, Ddrkg1 - ddrkg domain containing 1, Hpx - hemopexin, Fga - fibrinogen alpha chain, Clu - clusterin, Apoa1 - apolipoprotein a-i, Ncstn - nicastrin, Pcdcd5 - programmed cell death 5, Commd1 - comm domain containing 1, Mug1 - murinoglobulin 1]

	adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains	2.62E-6	3.51E-4	10,28	4935	21	160	7	[C4b - complement component 4b (chido blood group), Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Cf h - complement component factor h, Stat3 - signal transducer and activator of transcription 3]
GO:0002460									[Anxa3 - annexin a3, Gsn - gelsolin, Lamp2 - lysosomal-associated membrane protein 2, Irgm1 - immunity-related gtpase family m member 1, Serpin c1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Alb - albumin, Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Cf h - complement component factor h, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, C3 - complement component 3, Ig kc - immunoglobulin kappa constant, Vim - vimentin, Hp - haptoglobin, F2 - coagulation factor ii, Itga6 - integrin alpha 6, Fabp7 - fatty acid binding protein 7, brain, Mg st1 - microsomal glutathione s-transferase 1, Hrg - histidine-rich glycoprotein, Gba - glucosidase, beta, acid, Rbp1 - retinol binding protein 1, cellular, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fga - fibrinogen alpha chain, Ig hm - immunoglobulin heavy constant mu, Stat1 - signal transducer and activator of transcription 1, Tbl2 - transducin (beta)-like 2, Ces1c - carboxylesterase 1c]
GO:0009605	response to external stimulus	2.92E-6	3.86E-4	2,55	4935	339	160	28	[C3 - complement component 3, Ig kc - immunoglobulin kappa constant, Anxa3 - annexin a3, Vim - vimentin, Hp - haptoglobin, F2 - coagulation factor ii, Mg st1 - microsomal glutathione s-transferase 1, Hrg - histidine-rich glycoprotein, Irgm1 - immunity-related gtpase family m member 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Fga - fibrinogen alpha chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Cf h - complement component factor h, Stat1 - signal transducer and activator of transcription 1, Fgb - fibrinogen beta chain, Ces1c - carboxylesterase 1c]
GO:0009607	response to biotic stimulus	3.7E-6	4.84E-4	3,43	4935	162	160	18	[C3 - complement component 3, Ig kc - immunoglobulin kappa constant, Anxa3 - annexin a3, Vim - vimentin, Hp - haptoglobin, F2 - coagulation factor ii, Mg st1 - microsomal glutathione s-transferase 1, Hrg - histidine-rich glycoprotein, Irgm1 - immunity-related gtpase family m member 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Fga - fibrinogen alpha chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Cf h - complement component factor h, Stat1 - signal transducer and activator of transcription 1, Fgb - fibrinogen beta chain, Ces1c - carboxylesterase 1c]
GO:0002712	regulation of B cell mediated immunity	3.82E-6	4.94E-4	17,14	4935	9	160	5	[Hpx - hemopexin, C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002889	regulation of immunoglobulin mediated immune response	3.82E-6	4.88E-4	17,14	4935	9	160	5	[Hpx - hemopexin, C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0051248	negative regulation of protein metabolic process	4.44E-6	5.61E-4	2,35	4935	407	160	31	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Pzp - pregnancy zone protein, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Apod - apolipoprotein d, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Fhit - fragile histidine triad gene, Ctsa - cathepsin a, Kng1 - kininogen 1, Ide - insulin degrading enzyme, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Ddrgk1 - ddrgk domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Clu - clusterin, Mug1 - murinoglobulin 1, Anxa2 - annexin a2]

							[Wfs1 - wolfram syndrome 1 homolog (human), Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Ahsg - alpha-2-hs-glycoprotein, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Nes - nestin, Flna - filamin, alpha, Apoh - apolipoprotein h, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ndufs6 - nadh dehydrogenase (ubiquinone) fe-s protein 6, Kng1 - kininogen 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, Fabp7 - fatty acid binding protein 7, brain, F2 - coagulation factor ii, Alg5 - asparagine-linked glycosylation 5 (dolichyl-phosphate beta-glucosyltransferase), Arhgap22 - rho gtpase activating protein 22, Tpm1 - tropomyosin 1, alpha, Itgb2 - integrin beta 2, Gba - glucosidase, beta, acid, Ampd3 - adenosine monophosphate deaminase 3, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Scn3b - sodium channel, voltage-gated, type iii, beta, Plg - plasminogen, Tpm4 - tropomyosin 4, Anpep - alanyl (membrane) aminopeptidase, Gjb6 - gap junction protein, beta 6, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Cfh - complement component factor h, Gaa - glucosidase, alpha, acid, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, C3 - complement component 3, Krt1 - keratin 1, S100a13 - s100 calcium binding protein a13, C1qa - complement component 1, q subcomponent, alpha polypeptide, Hrg - histidine-rich glycoprotein, Kcnj10 - potassium inwardly-rectifying channel, subfamily j, member 10, Hexb - hexosaminidase b, Ybx1 - y box protein 1, Tgm1 - transglutaminase 1, k polypeptide, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Tgm2 - transglutaminase 2, c polypeptide, Fga - fibrinogen alpha chain, Krt71 - keratin
GO:0032501	multicellular organismal process	5.15E-6	6.44E-4	1,77	4935 939 160 54	71, Apoal - apolipoprotein a-i, Ncstn - nicastrin, Nptx2 - neuronal pentraxin 2, Commd1 - comm domain containing 1]	
GO:0072378	blood coagulation, fibrin clot formation	5.19E-6	6.42E-4	24,68	4935 5 160 4	[Fn1 - fibronectin 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Fgb - fibrinogen beta chain]	
GO:0002443	leukocyte mediated immunity	5.23E-6	6.4E-4	9,39	4935 23 160 7	[C4b - complement component 4b (chido blood group), Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Ig hm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, F2 - coagulation factor ii, Cfh - complement component factor h]	
GO:0050789	regulation of biological process	5.34E-6	6.47E-4	1,27	4935 3013 160 124	apolipoprotein d, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Kng1 - kininogen 1, F2 - coagulation factor ii, Arhgap22 - rho gtpase activating protein 22, Fabp5 - fatty acid binding protein 5, epidermal, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Sh3bgrl3 - sh3 domain binding glutamic acid-rich protein-like 3, Gba - glucosidase, beta, acid, Arhgdib - rho, gdp dissociation inhibitor (gdi) beta, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Nptx2 - neuronal pentraxin receptor, Arpc1b - actin related protein 2/3 complex, subunit 1b, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Plg - plasminogen, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Ctsb - cathepsin b, Lcp1 - lymphocyte cytosolic protein 1, Cst3 - cystatin c, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Irgm1 - immunity-related gtpase family m member 1, Fgg - fibrinogen gamma chain, Ctsd - cathepsin d, Gaa - glucosidase, alpha, acid, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, Krt1 - keratin 1, S100a13 - s100 calcium binding protein a13, Hrg - histidine-rich glycoprotein, Hexb - hexosaminidase b, Clu - clusterin, Ncstn - nicastrin, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Fn1 - fibronectin 1, Clic1 - chloride intracellular channel 1, Aif1 - allograft inflammatory factor 1, Acot1 - acyl-coa thioesterase 1, Nes - nestin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Mcam - melanoma cell adhesion molecule, P4hb - prolyl 4-hydroxylase, beta polypeptide, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Crip2 - cysteine rich protein 2, Alb - albumin, Ctsa - cathepsin a, Marcks1 - marcks-like 1, Cpe - carboxypeptidase e, Glipr2 - gli pathogenesis-related 2, Igkc - immunoglobulin kappa constant, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, Vim - vimentin, Itga6 - integrin alpha 6, Fabp7 - fatty acid binding protein 7, brain, Vtn - vitronectin, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Itgb2 - integrin beta 2, Rbp1 - retinol binding protein 1, cellular, Scarb2 - scavenger receptor class b, member 2, Orm1 - orosomucoid 1, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Ig hg2b - immunoglobulin heavy constant gamma 2b, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Ig hm - immunoglobulin heavy constant mu, Cd151 - cd151 antigen, Scn3b - sodium channel, voltage-gated, type iii, beta, Anxa3 - annexin a3, Ier3ip1 - immediate early response 3 interacting protein 1, Lamp2 - lysosomal-associated membrane protein 2, Lamp1 - lysosomal-associated membrane protein 1, Anpep - alanyl (membrane) aminopeptidase, Gjb6 - gap junction protein, beta 6, Lgmn - legumain, Fhit - fragile histidine triad gene, Cfh - complement component factor h, Sod1 - superoxide dismutase 1, soluble, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Lgals1 - lectin, galactose binding, soluble 1, C4b - complement component 4b (chido blood group), Ppp1r1a - protein phosphatase 1, regulatory (inhibitor) subunit 1a, Cfb - complement factor b, Hp - haptoglobin, C1qc - complement component 1, q subcomponent, c chain, Lingo2 - leucine rich repeat and ig domain containing 2, C1qa - complement component 1, q subcomponent, alpha polypeptide, Kcnj10 - potassium inwardly-rectifying channel, subfamily j, member 10, C1qb - complement component 1, q subcomponent, beta polypeptide, Drgrk1 - drgrk domain containing 1, Lsm6 - lsm6 homolog, U6 small nuclear rna associated (s. cerevisiae), Tgm1 - transglutaminase 1, k polypeptide, Ybx1 - y box protein 1, Hpx - hemopexin, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Tgm2 - transglutaminase 2, c polypeptide, Fga - fibrinogen alpha chain, Gfap - glial fibrillary acidic	

GO:0031347	regulation of defense response	6.24E-6	7.48E-4	3,30	4935 168	160 18	[C3 - complement component 3, Krt1 - keratin 1, Ahsg - alpha-2-hs-glycoprotein, F2 - coagulation factor ii, Lamp1 - lysosomal-associated membrane protein 1, Hpx - hemopexin, Tgm2 - transglutaminase 2, c polypeptide, Apod - apolipoprotein d, Irgm1 - immunity-related gtpase family m member 1, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Ighg2b - immunoglobulin heavy constant gamma 2b, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Apoa1 - apolipoprotein a-i, Cfh - complement component factor h, Stat3 - signal transducer and activator of transcription 3, Sod1 - superoxide dismutase 1, soluble, Stat1 - signal transducer and activator of transcription 1]	
	positive regulation of myeloid leukocyte mediated immunity							
GO:0002888	immunity	6.47E-6	7.67E-4	11,57	4935 16	160 6	[C3 - complement component 3, Itgam - integrin alpha m, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Itgb2 - integrin beta 2]	
	regulation of immune effector process						[C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Itgam - integrin alpha m, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2, Hpx - hemopexin, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Cfh - complement component factor h, Apoa1 - apolipoprotein a-i, Stat1 - signal transducer and activator of transcription 1]	
GO:0002697	positive regulation of leukocyte activation	6.5E-6	7.63E-4	4,36	4935 92	160 13	[Igk _c - immunoglobulin kappa constant, Lgals1 - lectin, galactose binding, soluble 1, Itgam - integrin alpha m, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Aif1 - allograft inflammatory factor 1, Ig hm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Irs2 - insulin receptor substrate 2, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2]	
GO:0002696	positive regulation of endocytosis	6.78E-6	7.87E-4	5,14	4935 66	160 11	[C3 - complement component 3, Itgb1 - integrin beta 1 (fibronectin receptor beta), Ahsg - alpha-2-hs-glycoprotein, Vtn - vitronectin, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Apoa1 - apolipoprotein a-i, Clu - clusterin, Cd151 - cd151 antigen, Sod1 - superoxide dismutase 1, soluble, Anxa2 - annexin a2]	
	regulation of cell proliferation						[Scg2 - secretogranin ii, Fn1 - fibronectin 1, Mvd - mevalonate (diphospho) decarboxylase, Aif1 - allograft inflammatory factor 1, Cst3 - cystatin c, Flna - filamin, alpha, Apoh - apolipoprotein h, Gjb6 - gap junction protein, beta 6, Apod - apolipoprotein d, Lgmn - legumain, Crip2 - cysteine rich protein 2, Marcks1 - marcks-like 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, F2 - coagulation factor ii, S100a13 - s100 calcium binding protein a13, Ddr4 - ddr4 domain containing 1, Itgb3 - integrin beta 3, Ybx1 - y box protein 1, Tgm1 - transglutaminase 1, k polypeptide, Tgm2 - transglutaminase 2, c polypeptide, Gfap - glial fibrillary acidic protein, Ig hm - immunoglobulin heavy constant mu, Pdcd5 - programmed cell death 5, Irs2 - insulin receptor substrate 2, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2]	
GO:0042127	leukocyte activation	7.48E-6	8.51E-4	2,38	4935 376	160 29	[Igk _c - immunoglobulin kappa constant, Anxa3 - annexin a3, Itgam - integrin alpha m, Lgals1 - lectin, galactose binding, soluble 1, Aif1 - allograft inflammatory factor 1, Lcp1 - lymphocyte cytosolic protein 1, C1qa - complement component 1, q subcomponent, alpha polypeptide, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Clu - clusterin, Ncstn - nicastrin, Cd151 - cd151 antigen]	
GO:0045321	platelet aggregation	7.98E-6	8.99E-4	4,00	4935 108	160 14	[Fn1 - fibronectin 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Cfh - complement component factor h, Itgb3 - integrin beta 3, Fgb - fibrinogen beta chain]	
	positive regulation of adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains						[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]	
GO:0002824		9.73E-6	1.08E-3	10,89	4935 17	160 6		

GO:0002703	regulation of leukocyte mediated immunity	1.03E-5	1.13E-3	6,17	4935 45	160 9	[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Itgam - integrin alpha m, Iggb2 - immunoglobulin heavy constant gamma 2b, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2]	
GO:0051704	multi-organism process	1.03E-5	1.12E-3	2,77	4935 245	160 22	[C3 - complement component 3, Igkc - immunoglobulin kappa constant, Plg - plasminogen, Anxa3 - annexin a3, Hp - haptoglobin, Fn1 - fibronectin 1, F2 - coagulation factor ii, Ctsb - cathepsin b, Hrg - histidine-rich glycoprotein, Itgb3 - integrin beta 3, Hexb - hexosaminidase b, Irgm1 - immunity-related gtpase family m member 1, Iggb2 - immunoglobulin heavy constant gamma 2b, Fga - fibrinogen alpha chain, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ighm - immunoglobulin heavy constant mu, Stat3 - signal transducer and activator of transcription 3, Fgb - fibrinogen beta chain, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Ces1c - carboxylesterase 1c]	
GO:0050727	regulation of inflammatory response	1.05E-5	1.13E-3	4,18	4935 96	160 13	[Krt1 - keratin 1, C3 - complement component 3, Ahsg - alpha-2-hs-glycoprotein, F2 - coagulation factor ii, Tgm2 - transglutaminase 2, c polypeptide, Apod - apolipoprotein d, Iggb2 - immunoglobulin heavy constant gamma 2b, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cfh - complement component factor h, Apoal - apolipoprotein a-i, Stat3 - signal transducer and activator of transcription 3, Sod1 - superoxide dismutase 1, soluble]	
GO:0048583	regulation of response to stimulus	1.18E-5	1.25E-3	1,63	4935 1171	160 62	[Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Fn1 - fibronectin 1, Ahsg - alpha-2-hs-glycoprotein, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Flna - filamin, alpha, Apoh - apolipoprotein h, Apod - apolipoprotein d, P4hb - prolyl 4-hydroxylase, beta polypeptide, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Kng1 - kininogen 1, Igkc - immunoglobulin kappa constant, Glpr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, F2 - coagulation factor ii, Fabp7 - fatty acid binding protein 7, brain, Itga6 - integrin alpha 6, Fabp5 - fatty acid binding protein 5, epidermal, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2, Iggb2 - immunoglobulin heavy constant gamma 2b, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Arhgdib - rho, gdp dissociation inhibitor (gdi) beta, Ighm - immunoglobulin heavy constant mu, Nptxr - neuronal pentraxin receptor, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Plg - plasminogen, Lamp1 - lysosomal-associated membrane protein 1, Lgmn - legumain, Irgm1 - immunity-related gtpase family m member 1, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Cfh - complement component factor h, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, C3 - complement component 3, Krt1 - keratin 1, H2-D1 - histocompatibility 2, d region locus 1, C4b - complement component 4b (chido blood group), Cfb - complement factor b, C1qc - complement component 1, q subcomponent, c chain, S100a13 - s100 calcium binding protein a13, C1qa - complement component 1, q subcomponent, alpha polypeptide, Hrg - histidine-rich glycoprotein, C1qb - complement component 1, q subcomponent, beta polypeptide, Ddrkg1 - ddrkg domain containing 1, Hpx - hemopexin, Ybx1 - y box protein 1, Tgm2 - transglutaminase 2, c polypeptide, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Fga - fibrinogen alpha chain, Pcd5 - programmed cell death 5, Apoal - apolipoprotein a-i, Clu - clusterin, Nptx2 - neuronal pentraxin 2, Commd1 - comm domain containing 1]	
GO:0002449	positive regulation of acute inflammatory response to antigenic stimulus	1.42E-5	1.5E-3	10,28	4935 18	160 6	[C4b - complement component 4b (chido blood group), Iggb2 - immunoglobulin heavy constant gamma 2b, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ighm - immunoglobulin heavy constant mu, Cfh - complement component factor h]	
GO:0002866	regulation of acute inflammatory response to antigenic stimulus	1.52E-5	1.58E-3	20,56	4935 6	160 4	[C3 - complement component 3, Iggb2 - immunoglobulin heavy constant gamma 2b, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]	
GO:0002864	regulation of acute inflammatory response to antigenic stimulus	1.52E-5	1.57E-3	20,56	4935 6	160 4	[C3 - complement component 3, Iggb2 - immunoglobulin heavy constant gamma 2b, Iggb1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]	
GO:0031639	plasminogen activation	1.52E-5	1.56E-3	20,56	4935 6	160 4	[Apoh - apolipoprotein h, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Fgb - fibrinogen beta chain]	

								[Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Acot1 - acyl-coa thioesterase 1, Gsn - gelsolin, Nes - nestin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Apoh - apolipoprotein h, Apod - apolipoprotein d, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Ppp1rlb - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Alb - albumin, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ctsa - cathepsin a, Cpe - carboxypeptidase e, Kng1 - kininogen 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, Vim - vimentin, Itga6 - integrin alpha 6, Fabp7 - fatty acid binding protein 7, brain, F2 - coagulation factor ii, Fabp5 - fatty acid binding protein 5, epidermal, Vtn - vitronectin, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Gba - glucosidase, beta, acid, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Arhgdib - rho, gdp dissociation inhibitor (gdi) beta, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Plg - plasminogen, Serph1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Ctsb - cathepsin b, Cst3 - cystatin c, Lamp2 - lysosomal-associated membrane protein 2, Anpep - alanyl (membrane) aminopeptidase, Gjb6 - gap junction protein, beta 6, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Fhit - fragile histidine triad gene, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, Krt1 - keratin 1, H2-D1 - histocompatibility 2, d region locus 1, Lgals1 - lectin, galactose binding, soluble 1, Hp - haptoglobin, C1qc - complement component 1, q subcomponent, c chain, Hrg - histidine-rich glycoprotein, Ddrkg1 - ddrkg domain containing 1, Lsm6 - lsm6 homolog, u6 small nuclear rna associated (s. cerevisiae), Ybx1 - y box protein 1, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Fga - fibrinogen alpha chain, Gfap - glial fibrillary acidic protein, Clu - clusterin, Apoal - apolipoprotein a-i, Pcd5 - programmed cell death 5, Commd1 - comm domain containing 1, Mug1 - murinoglobulin 1]
GO:0048519	negative regulation of biological process	1.61E-5	1.63E-3	1,50	4935	1564	160	76
GO:0050867	positive regulation of cell activation	1.84E-5	1.86E-3	4,65	4935	73	160	11
GO:0051240	positive regulation of multicellular organismal process	2.11E-5	2.1E-3	2,00	4935	572	160	37
GO:0002706	regulation of lymphocyte mediated immunity	2.2E-5	2.18E-3	7,71	4935	28	160	7
GO:1904036	negative regulation of epithelial cell apoptotic process	2.22E-5	2.17E-3	12,85	4935	12	160	5

[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Lamp1 - lysosomal-associated membrane protein 1]

[Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Fgb - fibrinogen beta chain]

	positive regulation of acute inflammatory response	3.45E-5	3.12E-3	17,62	4935 7	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002675	negative regulation of endothelial cell apoptotic process	3.45E-5	3.09E-3	17,62	4935 7	160 4	[Scg2 - secretogranin ii, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Fgb - fibrinogen beta chain]
GO:2000352	positive regulation of inflammatory response to antigenic stimulus	3.45E-5	3.07E-3	17,62	4935 7	160 4	[C3 - complement component 3, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002863	positive regulation of immune effector process	4.12E-5	3.63E-3	5,24	4935 53	160 9	[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Itgam - integrin alpha m, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2] [Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Scg2 - secretogranin ii, Anxa3 - annexin a3, Plg - plasminogen, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Ddr gk1 - ddr gk domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Flna - filamin, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Mcam - melanoma cell adhesion molecule, Lgmn - legumain, Fga - fibrinogen alpha chain, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen]
GO:0002699	positive regulation of locomotion	4.2E-5	3.68E-3	2,78	4935 211	160 19	[C3 - complement component 3, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Anxa3 - annexin a3, Plg - plasminogen, Itgb1 - integrin beta 1 (fibronectin receptor beta), Apoh - apolipoprotein h, Hrg - histidine-rich glycoprotein, Stat3 - signal transducer and activator of transcription 3, Itgb3 - integrin beta 3, Stat1 - signal transducer and activator of transcription 1, Itgb2 - integrin beta 2] [Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Anxa3 - annexin a3, Plg - plasminogen, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Ddr gk1 - ddr gk domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Flna - filamin, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Mcam - melanoma cell adhesion molecule, Lgmn - legumain, Fga - fibrinogen alpha chain, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen]
GO:0045765	regulation of angiogenesis	4.46E-5	3.88E-3	4,24	4935 80	160 11	[C3 - complement component 3, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Anxa3 - annexin a3, Plg - plasminogen, Itgb1 - integrin beta 1 (fibronectin receptor beta), Apoh - apolipoprotein h, Hrg - histidine-rich glycoprotein, Stat3 - signal transducer and activator of transcription 3, Itgb3 - integrin beta 3, Stat1 - signal transducer and activator of transcription 1, Itgb2 - integrin beta 2] [Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Anxa3 - annexin a3, Plg - plasminogen, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Ddr gk1 - ddr gk domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Flna - filamin, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Mcam - melanoma cell adhesion molecule, Lgmn - legumain, Fga - fibrinogen alpha chain, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen]
GO:0030335	positive regulation of cell migration	4.56E-5	3.93E-3	2,86	4935 194	160 18	[C3 - complement component 3, Itgam - integrin alpha m, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Itgb2 - integrin beta 2] [Fga - fibrinogen alpha chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain] [Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Ctsb - cathepsin b, Acot1 - acyl-coa thioesterase 1, Nes - nestin, Cst3 - cystatin c, Flna - filamin, alpha, Apoh - apolipoprotein h, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Lgmn - legumain, Fgg - fibrinogen gamma chain, Alb - albumin, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itga6 - integrin alpha 6, Ddr gk1 - ddr gk domain containing 1, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Ybx1 - y box protein 1, Fga - fibrinogen alpha chain, Irs2 - insulin receptor substrate 2, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3]
GO:1904035	regulation of myeloid leukocyte mediated immunity	5.13E-5	4.39E-3	8,41	4935 22	160 6	[Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Gsn - gelsolin, Fgb - fibrinogen beta chain]
GO:0002886	antimicrobial humoral response	5.13E-5	4.35E-3	8,41	4935 22	160 6	[C3 - complement component 3, Itgam - integrin alpha m, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Itgb2 - integrin beta 2] [Fga - fibrinogen alpha chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Fgb - fibrinogen beta chain] [Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Ctsb - cathepsin b, Acot1 - acyl-coa thioesterase 1, Nes - nestin, Cst3 - cystatin c, Flna - filamin, alpha, Apoh - apolipoprotein h, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Lgmn - legumain, Fgg - fibrinogen gamma chain, Alb - albumin, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itga6 - integrin alpha 6, Ddr gk1 - ddr gk domain containing 1, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Ybx1 - y box protein 1, Fga - fibrinogen alpha chain, Irs2 - insulin receptor substrate 2, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3]
GO:0019730	negative regulation of cell death	5.32E-5	4.48E-3	11,02	4935 14	160 5	[Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Ctsb - cathepsin b, Acot1 - acyl-coa thioesterase 1, Nes - nestin, Cst3 - cystatin c, Flna - filamin, alpha, Apoh - apolipoprotein h, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Lgmn - legumain, Fgg - fibrinogen gamma chain, Alb - albumin, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itga6 - integrin alpha 6, Ddr gk1 - ddr gk domain containing 1, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Ybx1 - y box protein 1, Fga - fibrinogen alpha chain, Irs2 - insulin receptor substrate 2, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3]
GO:0060548		5.59E-5	4.67E-3	2,22	4935 375	160 27	

GO:2000147	positive regulation of cell motility integrin-mediated signaling pathway	5.59E-5	4.65E-3	2,82	4935	197	160	18	[Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Anxa3 - annexin a3, Plg - plasminogen, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Ddrgrk1 - ddrgrk domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Flna - filamin, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Mcam - melanoma cell adhesion molecule, Lgmn - legumain, Fga - fibrinogen alpha chain, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen]					
GO:0007229		5.61E-5	4.63E-3	6,75	4935	32	160	7	[Itgb1 - integrin beta 1 (fibronectin receptor beta), Fn1 - fibronectin 1, Itga6 - integrin alpha 6, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Apoa1 - apolipoprotein a-i, Itgb3 - integrin beta 3, Itgb2 - integrin beta 2]					
GO:0051239	regulation of multicellular organismal process	6.3E-5	5.15E-3	1,64	4935	995	160	53	[Ahsg - alpha-2-hs-glycoprotein, Fn1 - fibronectin 1, Clic1 - chloride intracellular channel 1, Aif1 - allograft inflammatory factor 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Apod - apolipoprotein d, Alb - albumin, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cpe - carboxypeptidase e, Kng1 - kininogen 1, Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, Itgam - integrin alpha m, Itga6 - integrin alpha 6, F2 - coagulation factor ii, Fabp5 - fatty acid binding protein 5, epidermal, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Rbp1 - retinol binding protein 1, cellular, Itgb2 - integrin beta 2, Gba - glucosidase, beta, acid, Scarb2 - scavenger receptor class b, member 2, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Arhgdib - rho, gdp dissociation inhibitor (gdi) beta, Stat3 - signal transducer and activator of transcription 3, Nptxr - neuronal pentraxin receptor, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Scn3b - sodium channel, voltage-gated, type iii, beta, Plg - plasminogen, Anxa3 - annexin a3, Anpep - alanyl (membrane) aminopeptidase, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Gaa - glucosidase, alpha, acid, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Lgals1 - lectin, galactose binding, soluble 1, C1qc - complement component 1, q subcomponent, c chain, Lingo2 - leucine rich repeat and ig domain containing 2, Hrg - histidine-rich glycoprotein, Kcnj10 - potassium inwardly-rectifying channel, subfamily j, member 10, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Gfap - glial fibrillary acidic protein, Fga - fibrinogen alpha chain, Apoa1 - apolipoprotein a-i, Clu - clusterin, Nptx2 - neuronal pentraxin 2]					
GO:0050865	regulation of cell activation leukocyte activation involved in inflammatory response	6.71E-5	5.46E-3	3,32	4935	130	160	14	[Igkc - immunoglobulin kappa constant, Lgals1 - lectin, galactose binding, soluble 1, Itgam - integrin alpha m, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Hrg - histidine-rich glycoprotein, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2, Ighg2b - immunoglobulin heavy constant gamma 2b, Fgg - fibrinogen gamma chain, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ig hm - immunoglobulin heavy constant mu, Irs2 - insulin receptor substrate 2]					
GO:0002269	microglial cell activation	6.73E-5	5.43E-3	15,42	4935	8	160	4	[Itgam - integrin alpha m, Aif1 - allograft inflammatory factor 1, Clu - clusterin, C1qa - complement component 1, q subcomponent, alpha polypeptide]					
GO:0001774	extracellular structure organization	6.73E-5	5.39E-3	15,42	4935	8	160	4	[Itgam - integrin alpha m, Aif1 - allograft inflammatory factor 1, Clu - clusterin, C1qa - complement component 1, q subcomponent, alpha polypeptide]					
GO:0043062	extracellular matrix organization	7.18E-5	5.71E-3	4,41	4935	70	160	10	[Plg - plasminogen, Itgb1 - integrin beta 1 (fibronectin receptor beta), Fn1 - fibronectin 1, Gfap - glial fibrillary acidic protein, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Apoa1 - apolipoprotein a-i, Lcp1 - lymphocyte cytosolic protein 1, Vtn - vitronectin, Anxa2 - annexin a2]					
GO:0030198	organization	8.61E-5	6.8E-3	4,79	4935	58	160	9	[Plg - plasminogen, Itgb1 - integrin beta 1 (fibronectin receptor beta), Fn1 - fibronectin 1, Gfap - glial fibrillary acidic protein, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Lcp1 - lymphocyte cytosolic protein 1, Vtn - vitronectin, Anxa2 - annexin a2]					

GO:0050794	regulation of cellular process	9,00E-05	7.06E-3	1,25	4935	2835	160	115						
GO:0030334	regulation of cell migration	9.32E-5	7.26E-3	2,29	4935	323	160	24						
GO:0051272	positive regulation of cellular component movement	9.44E-5	7.31E-3	2,71	4935	205	160	18						
GO:0001525	angiogenesis	1.03E-4	7.95E-3	4,23	4935	73	160	10						
GO:1901342	regulation of vasculature development	1.09E-4	8.32E-3	3,86	4935	88	160	11						
GO:0002673	regulation of acute inflammatory response	1.1E-4	8.35E-3	9,64	4935	16	160	5						
GO:0050871	positive regulation of B cell activation	1.1E-4	8.29E-3	9,64	4935	16	160	5						

GO:0034109	homotypic cell-cell adhesion	1.12E-4	8.4E-3	7,40	4935 25	160 6	[Fn1 - fibronectin 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Cfh - complement component factor h, Itgb3 - integrin beta 3, Fgb - fibrinogen beta chain]
	regulation of adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains						
GO:0002822	humoral immune response mediated by circulating immunoglobulin	1.12E-4	8.35E-3	7,40	4935 25	160 6	[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Ighg2b - immunoglobulin heavy constant gamma 2b, Ighg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002455	regulation of cell adhesion	1.31E-4	9.65E-3	23,13	4935 4	160 3	[Ighg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Ig hm - immunoglobulin heavy constant mu] [Itgb1 - integrin beta 1 (fibronectin receptor beta), Plg - plasminogen, Lgals1 - lectin, galactose binding, soluble 1, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Gsn - gelsolin, Vtn - vitronectin, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Itgb2 - integrin beta 2, Flna - filamin, alpha, Tgm2 - transglutaminase 2, c polypeptide, Apod - apolipoprotein d, P4hb - prolyl 4-hydroxylase, beta polypeptide, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Apoa1 - apolipoprotein a-i, Fgb - fibrinogen beta chain]
GO:0030155	negative regulation of apoptotic process	1.36E-4	9.98E-3	2,55	4935 230	160 19	[Wfs1 - wolfram syndrome 1 homolog (human), Itgb1 - integrin beta 1 (fibronectin receptor beta), Scg2 - secretogranin ii, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Acot1 - acyl-coa thioesterase 1, Nes - nestin, Ddrhk1 - ddrhk domain containing 1, Gba - glucosidase, beta, acid, Ybx1 - y box protein 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Lgmn - legumain, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Alb - albumin, Clu - clusterin, Irs2 - insulin receptor substrate 2, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain]
GO:0043066	negative regulation of cellular protein metabolic process	1.42E-4	1.04E-2	2,28	4935 311	160 23	[Pzp - pregnancy zone protein, Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Serphn1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Fhit - fragile histidine triad gene, Kng1 - kininogen 1, Ide - insulin degrading enzyme, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Ddrhk1 - ddrhk domain containing 1, Vtn - vitronectin, Gba - glucosidase, beta, acid, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Mug1 - murinoglobulin 1, Anxa2 - annexin a2]
GO:0032269	cell-substrate adhesion	1.47E-4	1.06E-2	2,14	4935 375	160 26	[Itgb1 - integrin beta 1 (fibronectin receptor beta), Fn1 - fibronectin 1, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Itga6 - integrin alpha 6, Vtn - vitronectin, Itgb3 - integrin beta 3, Fgb - fibrinogen beta chain, Itgb2 - integrin beta 2]
GO:0031589	phagocytosis	1.47E-4	1.06E-2	4,48	4935 62	160 9	[Tgm2 - transglutaminase 2, c polypeptide, Itgb1 - integrin beta 1 (fibronectin receptor beta), Anxa3 - annexin a3, Itgam - integrin alpha m, Txndc5 - thioredoxin domain containing 5, Itgb3 - integrin beta 3, Itgb2 - integrin beta 2]
GO:0006909	regulation of cell motility	1.5E-4	1.07E-2	5,84	4935 37	160 7	[Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Plg - plasminogen, Anxa3 - annexin a3, Vim - vimentin, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Hrg - histidine-rich glycoprotein, Ddrhk1 - ddrhk domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Flna - filamin, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Apoh - apolipoprotein h, Mcam - melanoma cell adhesion molecule, Apod - apolipoprotein d, Lgmn - legumain, Fga - fibrinogen alpha chain, Arhgdib - rho, gdp dissociation inhibitor (gdi) beta, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen]
GO:2000145	platelet activation	1.5E-4	1.07E-2	2,22	4935 333	160 24	
GO:0030168		1.52E-4	1.07E-2	9,07	4935 17	160 5	[Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, F2 - coagulation factor ii, Itgb3 - integrin beta 3, Fgb - fibrinogen beta chain]

GO:0048518	positive regulation of biological process	1.77E-4	1.24E-2	1,38	4935	1811	160	81						
GO:0043067	regulation of programmed cell death peptide cross-linking	1.8E-4	1.26E-2	1,92	4935	514	160	32						
GO:0018149	positive regulation of hemostasis	1.92E-4	1.33E-2	12,34	4935	10	160	4	[Tgm1 - transglutaminase 1, k polypeptide, Krt1 - keratin 1, Tgm2 - transglutaminase 2, c polypeptide, Fga - fibrinogen alpha chain, Fn1 - fibronectin 1]					
GO:1900048	regulation of heterotypic cell-cell adhesion	1.92E-4	1.32E-2	12,34	4935	10	160	4	[Apoh - apolipoprotein h, Plg - plasminogen, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein]					
GO:0034114	positive regulation of blood coagulation	1.92E-4	1.32E-2	12,34	4935	10	160	4	[Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Apoa1 - apolipoprotein a-i, Fgb - fibrinogen beta chain]					
GO:0030194	regulation of endothelial cell apoptotic process	1.92E-4	1.31E-2	12,34	4935	10	160	4	[Plg - plasminogen, Apoh - apolipoprotein h, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein]					
GO:2000351	regulation of inflammatory response to antigenic stimulus	1.92E-4	1.3E-2	12,34	4935	10	160	4	[Scg2 - secretogranin ii, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Fgb - fibrinogen beta chain]					
GO:0002861	muscle cell cellular homeostasis	1.92E-4	1.29E-2	12,34	4935	10	160	4	[C3 - complement component 3, Ighg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide]					
GO:0046716									[Plg - plasminogen, Gaa - glucosidase, alpha, acid, Lamp2 - lysosomal-associated membrane protein 2, Sod1 - superoxide dismutase 1, soluble]					

GO:0010810	regulation of cell-substrate adhesion	1.99E-4	1.32E-2	3,61	4935 94	160 11	[Flna - filamin, alpha, Plg - plasminogen, Itgb1 - integrin beta 1 (fibronectin receptor beta), Lgals1 - lectin, galactose binding, soluble 1, Apod - apolipoprotein d, Fn1 - fibronectin 1, P4hb - prolyl 4-hydroxylase, beta polypeptide, Itga6 - integrin alpha 6, Apoa1 - apolipoprotein a-i, Vtn - vitronectin, Itgb3 - integrin beta 3]
GO:0042445	hormone metabolic process	2.12E-4	1.4E-2	5,54	4935 39	160 7	[Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Ctsb - cathepsin b, Apoa1 - apolipoprotein a-i, Ttr - transthyretin, Cpe - carboxypeptidase e, Rbp1 - retinol binding protein 1, cellular, Ide - insulin degrading enzyme]
GO:0002694	regulation of leukocyte activation	2.18E-4	1.43E-2	3,33	4935 111	160 12	[Igkc - immunoglobulin kappa constant, Lgals1 - lectin, galactose binding, soluble 1, Itgam - integrin alpha m, Iggh2b - immunoglobulin heavy constant gamma 2b, Iggh1 - immunoglobulin heavy constant gamma 1 (g1m marker), Aif1 - allograft inflammatory factor 1, Ig hm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Irs2 - insulin receptor substrate 2, Gsn - gelsolin, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2]
GO:0002274	myeloid leukocyte activation	2.2E-4	1.44E-2	6,61	4935 28	160 6	[Anxa3 - annexin a3, Itgam - integrin alpha m, Aif1 - allograft inflammatory factor 1, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Clu - clusterin, C1qa - complement component 1, q subcomponent, alpha polypeptide]
GO:0019882	antigen processing and presentation	2.2E-4	1.43E-2	6,61	4935 28	160 6	[H2-D1 - histocompatibility 2, d region locus 1, Ig hm - immunoglobulin heavy constant mu, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Gba - glucosidase, beta, acid, Ide - insulin degrading enzyme]
GO:0043069	negative regulation of programmed cell death	2.39E-4	1.55E-2	2,20	4935 322	160 23	[Wfs1 - wolfram syndrome 1 homolog (human), Itgb1 - integrin beta 1 (fibronectin receptor beta), Scg2 - secretogranin ii, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Itga6 - integrin alpha 6, Acot1 - acyl-coa thioesterase 1, Nes - nestin, Ddrkg1 - ddrkg domain containing 1, Gba - glucosidase, beta, acid, Ybx1 - y box protein 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Lgmn - legumain, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Alb - albumin, Clu - clusterin, Irs2 - insulin receptor substrate 2, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain]
GO:0010952	positive regulation of peptidase activity	2.4E-4	1.54E-2	4,21	4935 66	160 9	[Lgmn - legumain, Ncstn - nicastrin, Pcd5 - programmed cell death 5, Gsn - gelsolin, Ctsd - cathepsin d, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Ddrkg1 - ddrkg domain containing 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]
GO:0040012	regulation of locomotion	2.42E-4	1.55E-2	2,11	4935 365	160 25	[Anxa3 - annexin a3, Scg2 - secretogranin ii, Plg - plasminogen, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Mcam - melanoma cell adhesion molecule, Apod - apolipoprotein d, Lgmn - legumain, Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, Itga6 - integrin alpha 6, Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Ddrkg1 - ddrkg domain containing 1, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Fga - fibrinogen alpha chain, Arhgdib - rho, gdp dissociation inhibitor (gdi) beta, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen]
GO:0042981	regulation of apoptotic process	2.5E-4	1.59E-2	1,91	4935 500	160 31	[Wfs1 - wolfram syndrome 1 homolog (human), Scg2 - secretogranin ii, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Acot1 - acyl-coa thioesterase 1, Nes - nestin, Ier3ip1 - immediate early response 3 interacting protein 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Psmg2 - proteasome (prosome, macropain) assembly chaperone 2, Lgmn - legumain, P4hb - prolyl 4-hydroxylase, beta polypeptide, Fgg - fibrinogen gamma chain, Alb - albumin, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ctsd - cathepsin d, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Itgb1 - integrin beta 1 (fibronectin receptor beta), Itgam - integrin alpha m, Itga6 - integrin alpha 6, Ddrkg1 - ddrkg domain containing 1, Gba - glucosidase, beta, acid, Ybx1 - y box protein 1, Tgm2 - transglutaminase 2, c polypeptide, Fga - fibrinogen alpha chain, Clu - clusterin, Irs2 - insulin receptor substrate 2, Pcd5 - programmed cell death 5, Stat1 - signal transducer and activator of transcription 1]
GO:0042592	homeostatic process	2.59E-4	1.64E-2	1,91	4935 501	160 31	[Cfha - complement component factor h, Gaa - glucosidase, alpha, acid, Sod1 - superoxide dismutase 1, soluble, Kng1 - kininogen 1, Ide - insulin degrading enzyme, Krt1 - keratin 1, Itgb1 - integrin beta 1 (fibronectin receptor beta), Cp - ceruloplasmin, F2 - coagulation factor ii, Fabp5 - fatty acid binding protein 5, epidermal, Kcnj10 - potassium inward-rectifying channel, subfamily j, member 10, Hexb - hexosaminidase b, Sh3bgr13 - sh3 domain binding glutamic acid-rich protein-like 3, Rbp1 - retinol binding protein 1, cellular, Gba - glucosidase, beta, acid, Hpx - hemopexin, Tgm2 - transglutaminase 2, c polypeptide, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Ampd3 - adenosine monophosphate deaminase 3, Ncstn - nicastrin, Apoa1 - apolipoprotein a-i, Car14 - carbonic anhydrase 14, Txndc5 - thioredoxin domain containing 5, Commd1 - comm domain containing 1, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Scn3b - sodium channel, voltage-gated, type iii, beta]
GO:0016485	protein processing	2.62E-4	1.65E-2	4,66	4935 53	160 8	[Apoh - apolipoprotein h, Hp - haptoglobin, Lgmn - legumain, Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Ncstn - nicastrin, Cpe - carboxypeptidase e, Fgb - fibrinogen beta chain]
GO:0042110	Tcell activation	2.62E-4	1.64E-2	4,66	4935 53	160 8	[Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Itgam - integrin alpha m, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Ncstn - nicastrin, Lcp1 - lymphocyte cytosolic protein 1, Cd151 - cd151 antigen, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2]
GO:0070661	leukocyte proliferation	2.7E-4	1.68E-2	6,38	4935 29	160 6	[Itgam - integrin alpha m, Ncstn - nicastrin, Clu - clusterin, Cd151 - cd151 antigen, Itgb2 - integrin beta 2, Gba - glucosidase, beta, acid]

	regulation of adaptive immune response	2.7E-4	1.67E-2	6,38	4935 29	160 6	[Hpx - hemopexin, C3 - complement component 3, H2-D1 - histocompatibility 2, d region locus 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide]
GO:0002819	positive regulation of blood circulation	2.71E-4	1.66E-2	8,12	4935 19	160 5	[Fgg - fibrinogen gamma chain, Fga - fibrinogen alpha chain, Fgb - fibrinogen beta chain, Tpm1 - tropomyosin 1, alpha, Scn3b - sodium channel, voltage-gated, type iii, beta] [C3 - complement component 3, Ahsg - alpha-2-hs-glycoprotein, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Apoa1 - apolipoprotein a-i, Sod1 - superoxide dismutase 1, soluble]
GO:1903524	regulation of phagocytosis	2.93E-4	1.79E-2	5,27	4935 41	160 7	
GO:0050764	positive regulation of leukocyte degranulation	2.94E-4	1.79E-2	11,22	4935 11	160 4	[Itgam - integrin alpha m, Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Lamp1 - lysosomal-associated membrane protein 1, Itgb2 - integrin beta 2]
GO:0043302	glial cell activation	2.94E-4	1.78E-2	11,22	4935 11	160 4	[Itgam - integrin alpha m, Aif1 - allograft inflammatory factor 1, Clu - clusterin, C1qa - complement component 1, q subcomponent, alpha polypeptide] [Anxa3 - annexin a3, Plg - plasminogen, Fn1 - fibronectin 1, Aif1 - allograft inflammatory factor 1, Lamp1 - lysosomal-associated membrane protein 1, Flna - filamin, alpha, Apoh - apolipoprotein h, Mcam - melanoma cell adhesion molecule, Apod - apolipoprotein d, Lgmn - legumain, Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, Itga6 - integrin alpha 6, Hrg - histidine-rich glycoprotein, Vtn - vitronectin, Ddrk1 - ddrk domain containing 1, Itgb3 - integrin beta 3, Tpm1 - tropomyosin 1, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Fga - fibrinogen alpha chain, Arhgdb - rho, gdp dissociation inhibitor (gdi) beta, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Cd151 - cd151 antigen]
GO:0061900	regulation of cellular component movement	2.99E-4	1.8E-2	2,08	4935 370	160 25	
GO:0051270	positive regulation of lymphocyte activation	2.99E-4	1.79E-2	4,57	4935 54	160 8	[Igkc - immunoglobulin kappa constant, Lgals1 - lectin, galactose binding, soluble 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Aif1 - allograft inflammatory factor 1, Ig hm - immunoglobulin heavy constant mu, Irs2 - insulin receptor substrate 2, Lamp1 - lysosomal-associated membrane protein 1]
GO:0051251	negative regulation of fibrinolysis	3.19E-4	1.9E-2	18,51	4935 5	160 3	[Apoh - apolipoprotein h, Plg - plasminogen, Hrg - histidine-rich glycoprotein]
GO:0051918	regulation of fibrinolysis	3.19E-4	1.89E-2	18,51	4935 5	160 3	[Plg - plasminogen, Apoh - apolipoprotein h, Hrg - histidine-rich glycoprotein]
GO:0051917	glial cell differentiation	3.29E-4	1.94E-2	6,17	4935 30	160 6	[Vim - vimentin, Gfap - glial fibrillary acidic protein, Stat3 - signal transducer and activator of transcription 3, Tspan2 - tetraspanin 2, Vtn - vitronectin, Gba - glucosidase, beta, acid]
GO:0010001	negative regulation of developmental process	3.45E-4	2.03E-2	2,25	4935 288	160 21	[Itgb1 - integrin beta 1 (fibronectin receptor beta), Plg - plasminogen, H2-D1 - histocompatibility 2, d region locus 1, Vim - vimentin, Lgals1 - lectin, galactose binding, soluble 1, Ahsg - alpha-2-hs-glycoprotein, C1qc - complement component 1, q subcomponent, c chain, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Itgb3 - integrin beta 3, Ybx1 - y box protein 1, Flna - filamin, alpha, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Apoh - apolipoprotein h, Lgmn - legumain, Gfap - glial fibrillary acidic protein, Arhgdb - rho, gdp dissociation inhibitor (gdi) beta, Stat3 - signal transducer and activator of transcription 3, Cpe - carboxypeptidase e, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2]
GO:0090303	positive regulation of wound healing	3.51E-4	2.05E-2	7,71	4935 20	160 5	[Apoh - apolipoprotein h, Itgb1 - integrin beta 1 (fibronectin receptor beta), Plg - plasminogen, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein] [Igkc - immunoglobulin kappa constant, Sema4a - sema domain, immunoglobulin domain (ig), transmembrane domain (tm) and short cytoplasmic domain, (semaphorin) 4a, Lgals1 - lectin, galactose binding, soluble 1, Itgam - integrin alpha m, Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Ncstn - nicastrin, Lcp1 - lymphocyte cytosolic protein 1, Cd151 - cd151 antigen, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2]
GO:0046649	lymphocyte activation protein	3.73E-4	2.16E-2	3,63	4935 85	160 10	
GO:0051258	polymerization positive regulation of response to wounding	3.97E-4	2.29E-2	5,97	4935 31	160 6	[Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Vtn - vitronectin, Fgb - fibrinogen beta chain]
GO:1903036		3.97E-4	2.28E-2	5,97	4935 31	160 6	[Flna - filamin, alpha, Itgb1 - integrin beta 1 (fibronectin receptor beta), Apoh - apolipoprotein h, Plg - plasminogen, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein]

	regulation of collagen metabolic process	4.3E-4	2.46E-2	10,28	4935 12	160 4	[Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, Fn1 - fibronectin 1, F2 - coagulation factor ii]
GO:0010712	positive regulation of coagulation	4.3E-4	2.45E-2	10,28	4935 12	160 4	[Apoh - apolipoprotein h, Plg - plasminogen, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein]
GO:0050820	macrophage activation	4.3E-4	2.43E-2	10,28	4935 12	160 4	[Itgam - integrin alpha m, Aif1 - allograft inflammatory factor 1, Clu - clusterin, C1qa - complement component 1, q subcomponent, alpha polypeptide]
GO:0042116	positive regulation of cell-substrate adhesion	4.38E-4	2.47E-2	4,33	4935 57	160 8	[Flna - filamin, alpha, Itgb1 - integrin beta 1 (fibronectin receptor beta), Fn1 - fibronectin 1, P4hb - prolyl 4-hydroxylase, beta polypeptide, Itga6 - integrin alpha 6, Apoa1 - apolipoprotein a-i, Vtn - vitronectin, Itgb3 - integrin beta 3]
GO:0010811							[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Wfs1 - wolfram syndrome 1 homolog (human), Pzp - pregnancy zone protein, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Fn1 - fibronectin 1, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Aif1 - allograft inflammatory factor 1, Serpinh1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Apoh - apolipoprotein h, ApoD - apolipoprotein d, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Fhit - fragile histidine triad gene, Ctsa - cathepsin a, Sod1 - superoxide dismutase 1, soluble, Kng1 - kininogen 1, Ide - insulin degrading enzyme, Itgam - integrin alpha m, Hp - haptoglobin, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Ddrhk1 - ddrhk domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Lsm6 - lsm6 homolog, u6 small nuclear rna associated (s. cerevisiae), Ybx1 - y box protein 1, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Irs2 - insulin receptor substrate 2, Clu - clusterin, Mug1 - murinoglobulin 1, Stat3 - signal transducer and activator of transcription 3, Anxa2 - annexin a2]
GO:0009892	negative regulation of metabolic process	4.6E-4	2.58E-2	1,64	4935 811	160 43	
	positive regulation of inflammatory response	4.76E-4	2.65E-2	5,78	4935 32	160 6	[C3 - complement component 3, Tgm2 - transglutaminase 2, c polypeptide, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Stat3 - signal transducer and activator of transcription 3]
GO:0050729	regulation of B cell activation	5.66E-4	3.14E-2	7,01	4935 22	160 5	[Igkc - immunoglobulin kappa constant, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Ig hm - immunoglobulin heavy constant mu, Irs2 - insulin receptor substrate 2]
GO:0050864	B cell receptor signaling pathway	6.05E-4	3.34E-2	9,49	4935 13	160 4	[Igkc - immunoglobulin kappa constant, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Ig hm - immunoglobulin heavy constant mu]
GO:0050853	amyloid-beta clearance	6.05E-4	3.33E-2	9,49	4935 13	160 4	[C3 - complement component 3, Itgam - integrin alpha m, Ide - insulin degrading enzyme, Itgb2 - integrin beta 2]
GO:0097242	complement activation, alternative pathway	6.23E-4	3.41E-2	15,42	4935 6	160 3	[C3 - complement component 3, Cfb - complement factor b, Cfh - complement component factor h]
GO:0006957	positive regulation of heterotypic cell-cell adhesion	6.23E-4	3.39E-2	15,42	4935 6	160 3	[Fga - fibrinogen alpha chain, Fgg - fibrinogen gamma chain, Fgb - fibrinogen beta chain]
GO:0034116	hyaluronan metabolic process	6.23E-4	3.37E-2	15,42	4935 6	160 3	[Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1]
GO:0030212	positive regulation of defense response	6.99E-4	3.77E-2	3,65	4935 76	160 9	[Hpx - hemopexin, C3 - complement component 3, Tgm2 - transglutaminase 2, c polypeptide, Irgm1 - immunity-related gtpase family m member 1, Ig hg2b - immunoglobulin heavy constant gamma 2b, Ig hg1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fc er1g - fc receptor, ige, high affinity i, gamma polypeptide, Stat3 - signal transducer and activator of transcription 3, Lamp1 - lysosomal-associated membrane protein 1]
GO:0031349							

GO:0042221	response to chemical	7.84E-4	4.21E-2	1,58	4935 857 160 44	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Wfs1 - wolfram syndrome 1 homolog (human), Fn1 - fibronectin 1, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Aif1 - allograft inflammatory factor 1, S100a16 - s100 calcium binding protein a16, Gsn - gelsolin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Apod - apolipoprotein d, Lgmn - legumain, Irgm1 - immunity-related gtpase family m member 1, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, P4hb - prolyl 4-hydroxylase, beta polypeptide, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Fgg - fibrinogen gamma chain, Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Cfh - complement component factor h, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, Crot - carnitine o-octanoyltransferase, Cfb - complement factor b, Hp - haptoglobin, Cp - ceruloplasmin, Mgst1 - microsomal glutathione s-transferase 1, Hrg - histidine-rich glycoprotein, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Gss - glutathione synthetase, Itgb2 - integrin beta 2, Rbp1 - retinol binding protein 1, cellular, Ybx1 - y box protein 1, Fga - fibrinogen alpha chain, Pcd5 - programmed cell death 5, Ncstn - nicastrin, Irs2 - insulin receptor substrate 2, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Tbl2 - transducin (beta)-like 2, Anxa2 - annexin a2]		
GO:0034097	response to cytokine	8.19E-4	4.37E-2	2,51	4935 184 160 15	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Vim - vimentin, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Fn1 - fibronectin 1, Gsn - gelsolin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Gba - glucosidase, beta, acid, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Ybx1 - y box protein 1, Irgm1 - immunity-related gtpase family m member 1, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, P4hb - prolyl 4-hydroxylase, beta polypeptide, Cfh - complement component factor h, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]		
negative regulation of nitrogen compound metabolic process		8.71E-4	4.63E-2	1,70	4935 634 160 35	[Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Wfs1 - wolfram syndrome 1 homolog (human), Pzp - pregnancy zone protein, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Ahsg - alpha-2-hs-glycoprotein, Serph1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Apod - apolipoprotein d, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Fhit - fragile histidine triad gene, Ctsa - cathepsin a, Kng1 - kininogen 1, Ide - insulin degrading enzyme, Itgam - integrin alpha m, F2 - coagulation factor ii, Hrg - histidine-rich glycoprotein, Ddrkg1 - ddrkg domain containing 1, Vtn - vitronectin, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Ybx1 - y box protein 1, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Clu - clusterin, Stat3 - signal transducer and activator of transcription 3, Mug1 - murinoglobulin 1, Anxa2 - annexin a2]		
						[Pzp - pregnancy zone protein, Wfs1 - wolfram syndrome 1 homolog (human), Serpina1b - serine (or cysteine) peptidase inhibitor, clade a, member 1b, Fn1 - fibronectin 1, Ahsg - alpha-2-hs-glycoprotein, Serpina1a - serine (or cysteine) peptidase inhibitor, clade a, member 1a, Aif1 - allograft inflammatory factor 1, Gsn - gelsolin, Serpina1d - serine (or cysteine) peptidase inhibitor, clade a, member 1d, Serpina1e - serine (or cysteine) peptidase inhibitor, clade a, member 1e, Flna - filamin, alpha, Apod - apolipoprotein d, Serpina3k - serine (or cysteine) peptidase inhibitor, clade a, member 3k, Ppp1r1b - protein phosphatase 1, regulatory (inhibitor) subunit 1b, Ctsa - cathepsin a, Kng1 - kininogen 1, Glipr2 - gli pathogenesis-related 2, Itgb1 - integrin beta 1 (fibronectin receptor beta), Vim - vimentin, Itgam - integrin alpha m, F2 - coagulation factor ii, Itga6 - integrin alpha 6, Fabp5 - fatty acid binding protein 5, epidermal, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Vtn - vitronectin, Itgb3 - integrin beta 3, Gba - glucosidase, beta, acid, Itgb2 - integrin beta 2, Scarb2 - scavenger receptor class b, member 2, Serpinb1a - serine (or cysteine) peptidase inhibitor, clade b, member 1a, Itih3 - inter-alpha trypsin inhibitor, heavy chain 3, Itih2 - inter-alpha trypsin inhibitor, heavy chain 2, Igmu - immunoglobulin heavy constant mu, Itih1 - inter-alpha trypsin inhibitor, heavy chain 1, Irs2 - insulin receptor substrate 2, Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1, Anxa2 - annexin a2, Serpina6 - serine (or cysteine) peptidase inhibitor, clade a, member 6, Anxa3 - annexin a3, Serph1 - serine (or cysteine) peptidase inhibitor, clade h, member 1, Cst3 - cystatin c, Lgmn - legumain, Serpinc1 - serine (or cysteine) peptidase inhibitor, clade c (antithrombin), member 1, Fgg - fibrinogen gamma chain, Fhit - fragile histidine triad gene, Cfh - complement component factor h, Ctsd - cathepsin d, Sod1 - superoxide dismutase 1, soluble, Fgb - fibrinogen beta chain, Ide - insulin degrading enzyme, C3 - complement component 3, Itgb1 - integrin beta 1 (fibronectin receptor beta), Ahsg - alpha-2-hs-glycoprotein, Vtn - vitronectin, Itgb3 - integrin beta 3, Iggb2 - immunoglobulin heavy constant gamma 2b, Iggh1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Igmu - immunoglobulin heavy constant mu, Apo1 - apolipoprotein a-i, Clu - clusterin, Cd151 - cd151 antigen, Sod1 - superoxide dismutase 1, soluble, Anxa2 - annexin a2]		
GO:0080090	regulation of primary metabolic process	8.8E-4	4.66E-2	1,40	4935 1458 160 66	[C3 - complement component 3, Itgb1 - integrin beta 1 (fibronectin receptor beta), Ahsg - alpha-2-hs-glycoprotein, Vtn - vitronectin, Itgb3 - integrin beta 3, Iggb2 - immunoglobulin heavy constant gamma 2b, Iggh1 - immunoglobulin heavy constant gamma 1 (g1m marker), Fcer1g - fc receptor, ige, high affinity i, gamma polypeptide, Igmu - immunoglobulin heavy constant mu, Apo1 - apolipoprotein a-i, Clu - clusterin, Cd151 - cd151 antigen, Sod1 - superoxide dismutase 1, soluble, Anxa2 - annexin a2]		
GO:0030100	regulation of endocytosis positive regulation of endopeptidase activity	9.31E-4	4.9E-2	2,59	4935 167 160 14	[Lgmn - legumain, Pcd5 - programmed cell death 5, Ncstn - nicastrin, Gsn - gelsolin, Ctsd - cathepsin d, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]		
GO:0010950		9.67E-4	5.07E-2	3,86	4935 64 160 8	[Lgmn - legumain, Pcd5 - programmed cell death 5, Ncstn - nicastrin, Gsn - gelsolin, Ctsd - cathepsin d, Psme1 - proteasome (prosome, macropain) activator subunit 1 (pa28 alpha), Stat3 - signal transducer and activator of transcription 3, Stat1 - signal transducer and activator of transcription 1]		

enriched GO terms of decreased proteins (biological process)

GO Term	Description	P-value	FDR q-value	Enrichment	N	B	n	b	Genes
GO:0048169	regulation of long-term neuronal synaptic plasticity	4.39E-6	4.99E-2	19,35	4935	25	51	5	[Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3, Grin1 - glutamate receptor, ionotropic, nmda1 (zeta 1), Syngap1 - synaptic ras gtpase activating protein 1 homolog (rat), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)]
GO:0099601	regulation of neurotransmitter receptor activity	7.73E-5	4.4E-1	11,00	4935	44	51	5	[Dlg4 - discs, large homolog 4 (drosophila), Dlgap2 - discs, large (drosophila) homolog-associated protein 2, Shank3 - sh3/ankyrin domain gene 3, Gsg1l - gsg1-like, Begain - brain-enriched guanylate kinase-associated]
GO:0048168	regulation of neuronal synaptic plasticity	1.07E-4	4.05E-1	10,29	4935	47	51	5	[Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3, Grin1 - glutamate receptor, ionotropic, nmda1 (zeta 1), Syngap1 - synaptic ras gtpase activating protein 1 homolog (rat), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)]
GO:0035405	histone-threonine phosphorylation	3.12E-4	8.88E-1	64,51	4935	3	51	2	[Prkca - protein kinase c, alpha, Pkn1 - protein kinase n1] [Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3, Grin1 - glutamate receptor, ionotropic, nmda1 (zeta 1), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)]
GO:0051705	multi-organism behavior	3.32E-4	7.56E-1	11,73	4935	33	51	4	[Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3, Grin1 - glutamate receptor, ionotropic, nmda1 (zeta 1), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)]
GO:0050905	neuromuscular process	3.71E-4	7.04E-1	7,93	4935	61	51	5	[Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3, Grin1 - glutamate receptor, ionotropic, nmda1 (zeta 1), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2), Rbfox1 - rna binding protein, fox-1 homolog (c. elegans) 1]
GO:0010469	regulation of signaling receptor activity	4.00E-04	6.51E-1	7,80	4935	62	51	5	[Dlg4 - discs, large homolog 4 (drosophila), Dlgap2 - discs, large (drosophila) homolog-associated protein 2, Shank3 - sh3/ankyrin domain gene 3, Gsg1l - gsg1-like, Begain - brain-enriched guanylate kinase-associated] [Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3, Syngap1 - synaptic ras gtpase activating protein 1 homolog (rat), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)]
GO:0043113	receptor clustering	4.18E-4	5.95E-1	11,06	4935	35	51	4	[Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3, Syngap1 - synaptic ras gtpase activating protein 1 homolog (rat), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)]
GO:2000821	regulation of grooming behavior	6.2E-4	7.84E-1	48,38	4935	4	51	2	[Dlg4 - discs, large homolog 4 (drosophila), Shank3 - sh3/ankyrin domain gene 3]
GO:0097553	calcium ion transmembrane import into cytosol	7.61E-4	8.66E-1	16,13	4935	18	51	3	[Grin1 - glutamate receptor, ionotropic, nmda1 (zeta 1), Plcg2 - phospholipase c, gamma 2, Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)] [Prkca - protein kinase c, alpha, Chd5 - chromodomain helicase dna binding protein 5, Pkn1 - protein kinase n1, Smarca4 - swi/snfr related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4, Smyd3 - set and mynd domain containing 3]
GO:0016570	histone modification	8.01E-4	8.29E-1	6,72	4935	72	51	5	[Prkca - protein kinase c, alpha, Chd5 - chromodomain helicase dna binding protein 5, Pkn1 - protein kinase n1, Smarca4 - swi/snfr related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4, Smyd3 - set and mynd domain containing 3]
GO:0016569	covalent chromatin modification	8.01E-4	7.6E-1	6,72	4935	72	51	5	[Prkca - protein kinase c, alpha, Chd5 - chromodomain helicase dna binding protein 5, Pkn1 - protein kinase n1, Smarca4 - swi/snfr related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4, Smyd3 - set and mynd domain containing 3]
GO:0045471	response to ethanol	8.97E-4	7.85E-1	15,28	4935	19	51	3	[Prkca - protein kinase c, alpha, Grin1 - glutamate receptor, ionotropic, nmda1 (zeta 1), Grin2b - glutamate receptor, ionotropic, nmda2b (epsilon 2)]