

Supplemental Figure 1

A “Knockout (KO)- first” *Trib1* null allele on C57BL/6 background

	+/+	+/tm1a	tm1a/tm1a
Observed	14	32	0.0
Expected	11.5	23	11.5
Chi-squared test	0.0004		

B “Conditional-ready” *Trib1* null allele

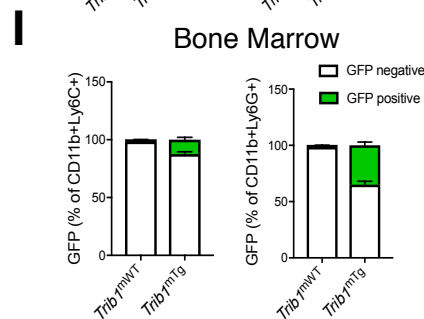
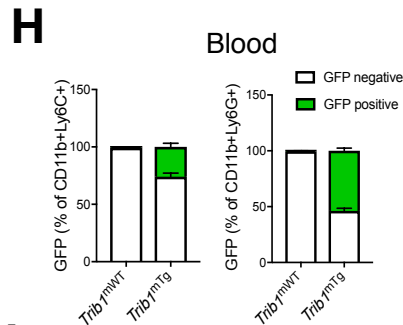
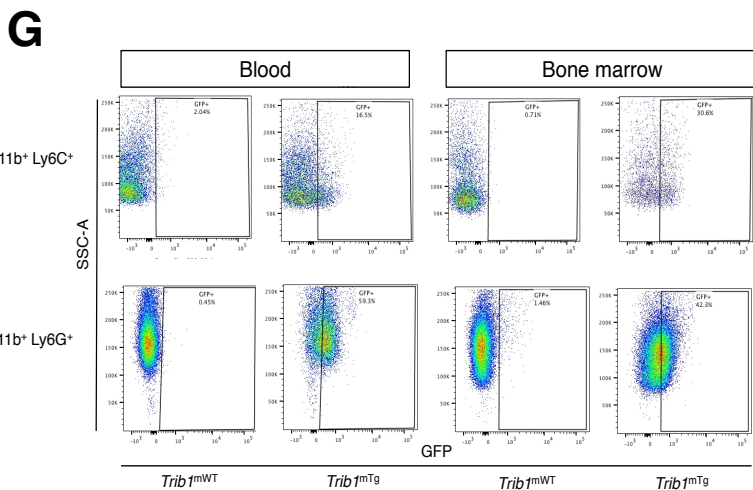
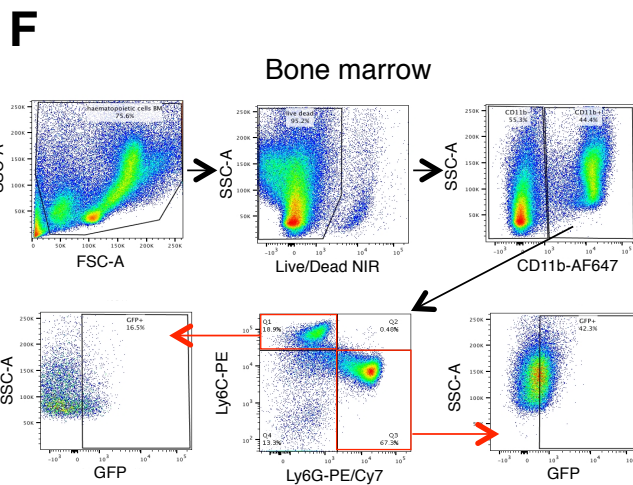
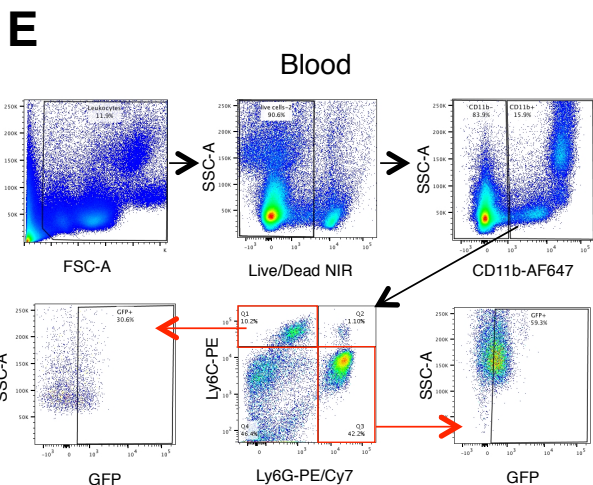
	+/+	+/tm1c	tm1c/tm1c
Observed	9	17	10
Expected	9	18	9
Chi-squared test	0.92		

C Conditional-*Trib1* null allele (tm1d) on C57BL/6 background

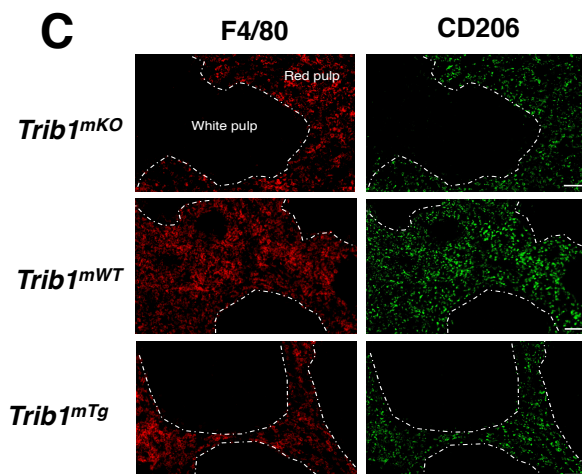
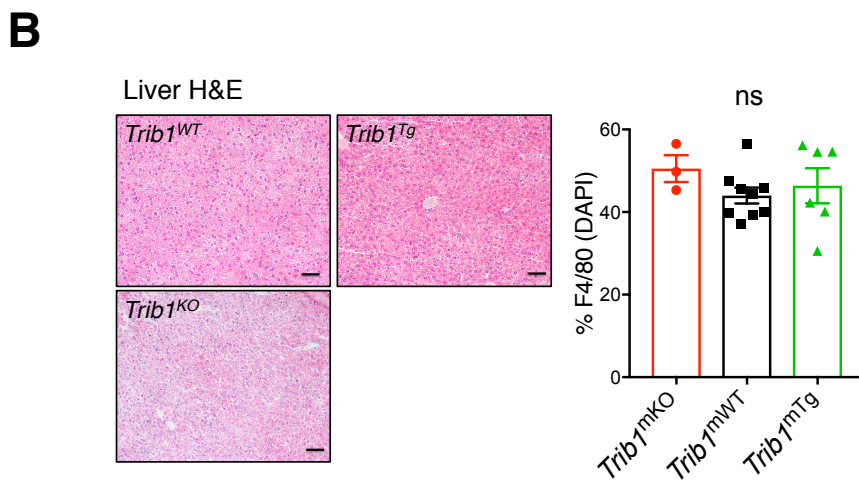
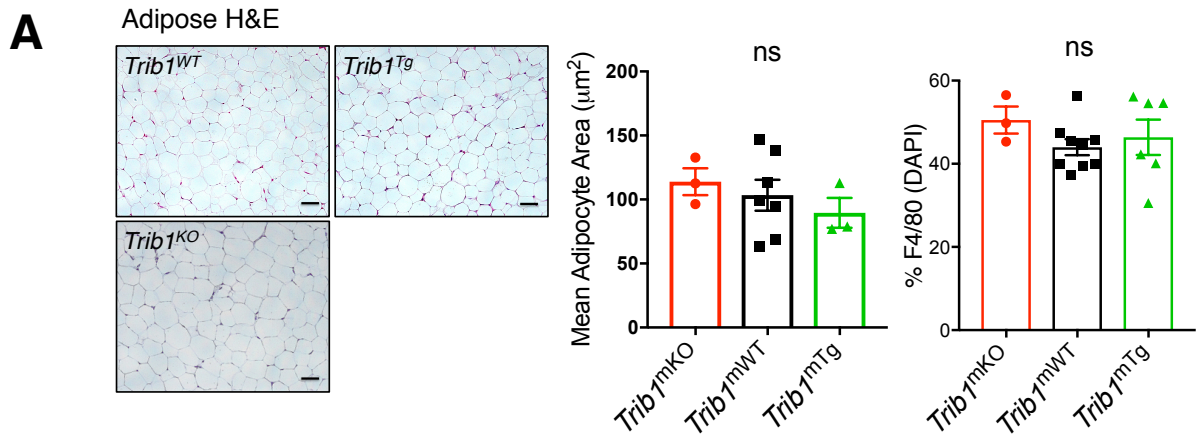
	tm1c/tm1c	tm1c/tm1d	tm1d/tm1d
Observed	20	54	7
Expected	25.25	50.5	25.25
Chi-squared test	0.0007		

D “KO- first” *Trib1* null allele on mixed genetic background

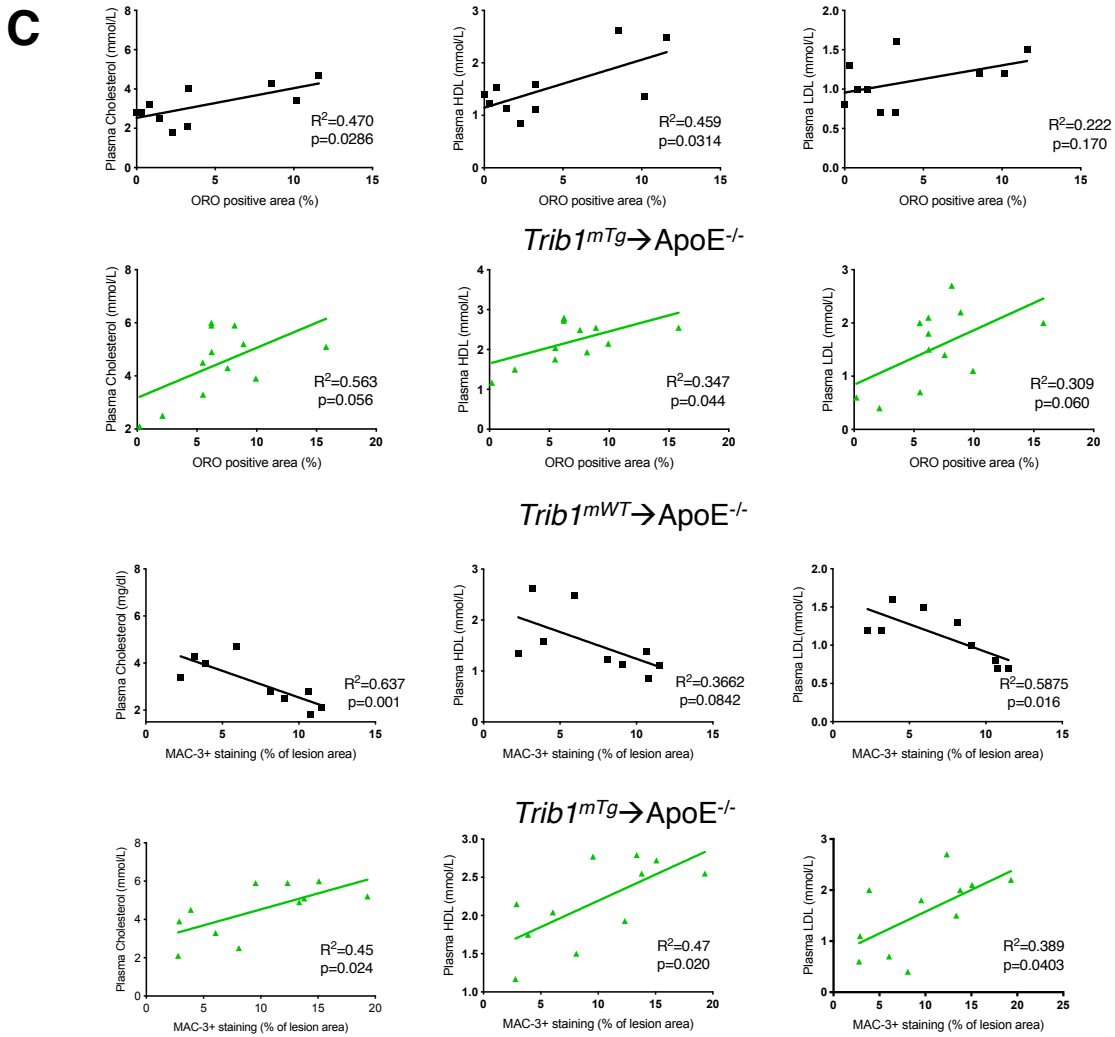
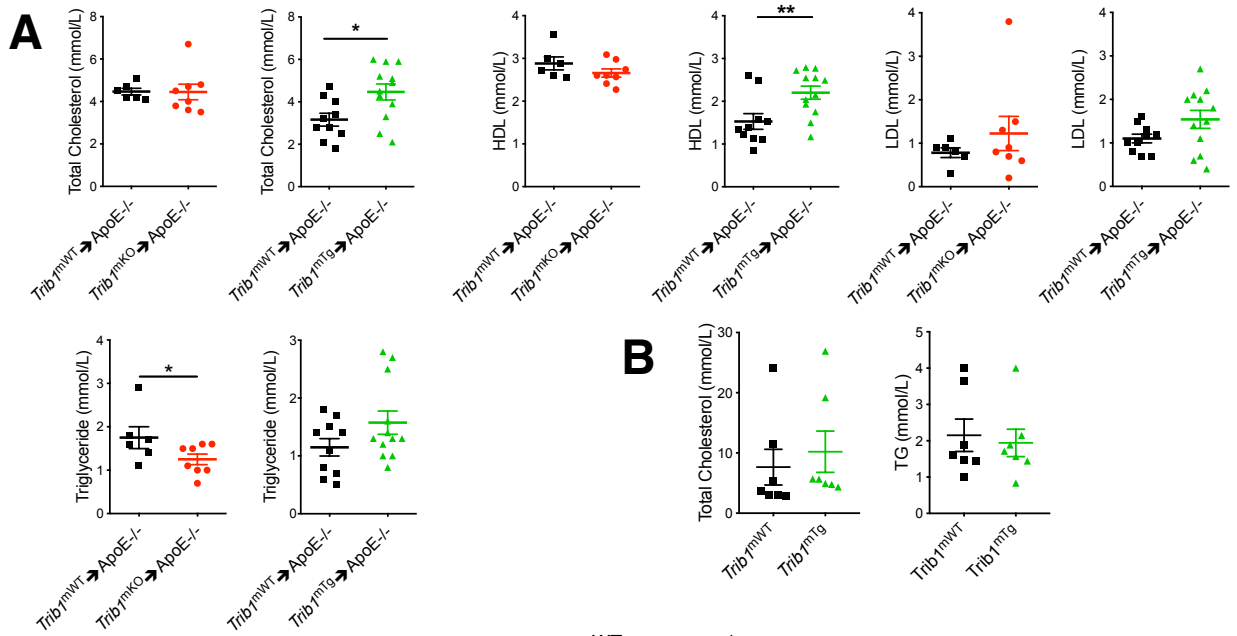
	+/+	+/tm1a	tm1a/tm1a
Observed	39	77	25
Expected	35.25	71	35.25
Chi-squared test	0.14		



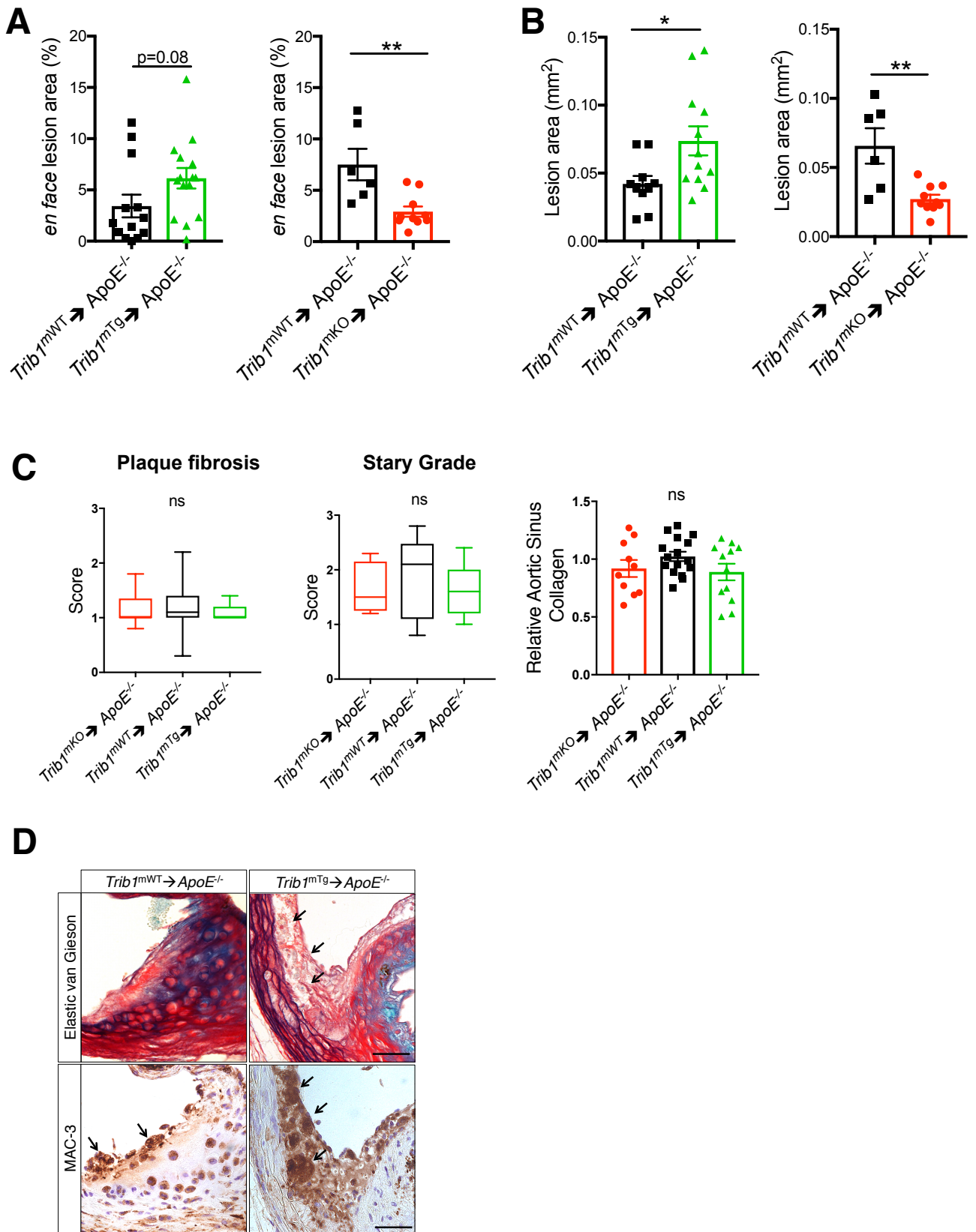
Supplemental Figure 2



Supplemental Figure 3

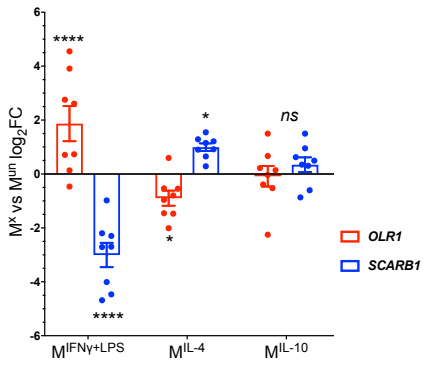


Supplemental Figure 4

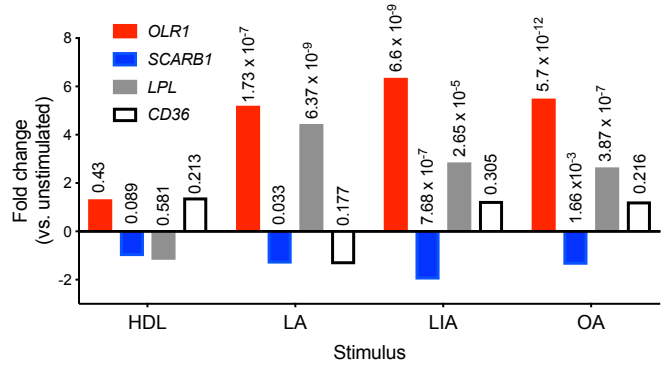


Supplemental Figure 5

A



B



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STable. 1.

Gene.ID	Monocyte-derived-Macrophages					Monocytes				
	log.fold	fold.change	t.statistics	p.values	q.values	log.fold	fold.change	t.statistics	p.values	q.values
AARS	-0.304137224	0.809926432	-8.782897728	1.31E-16	2.69E-14	-0.065066552	0.95590122	-3.843905469	0.000142206	0.001565015
ABHD14A	-0.220750797	0.858118744	-8.037885032	2.20E-14	2.57E-12	-0.098909216	0.9337387	-5.156138259	4.09E-07	1.30E-05
ACAT1	-0.148057487	0.902464766	-5.76394764	2.06E-08	5.23E-07	-0.07291358	0.950716049	-4.575812807	6.46E-06	0.000125567
ADCY3	-0.254850629	0.838073901	-8.218052384	6.54E-15	9.18E-13	-0.158691965	0.895836923	-3.566095551	0.000409236	0.003567832
ADORA2B^B	-0.38349133	0.766580215	-8.95060471	3.99E-17	8.90E-15	-0.102855836	0.931187866	-3.588055639	0.000377325	0.003367428
AHR	0.141652554	1.103168031	4.970874874	1.13E-06	1.79E-05	0.16153246	1.118474573	5.087764035	5.74E-07	1.68E-05
AKR7A2	-0.078918283	0.946767257	-3.488746621	0.000559022	0.003634005	-0.072663646	0.950880766	-4.49269597	9.38E-06	0.00017144
ALDH3A2	-0.108851881	0.927325749	-3.553768781	0.00044182	0.002983349	-0.083274197	0.943913003	-4.0872901	5.34E-05	0.000715008
ALG3	-0.085239414	0.942628095	-4.042024821	6.76E-05	0.000611276	-0.052242293	0.964436199	-3.536274173	0.000456637	0.003915552
ALKBH7	-0.101966495	0.931762068	-4.386983346	1.60E-05	0.000180532	-0.077062159	0.94798612	-4.923005676	1.28E-06	3.35E-05
ANAPC11	-0.085872707	0.942214405	-4.44761784	1.23E-05	0.000141461	-0.05873906	0.960102899	-3.585411076	0.00038104	0.003378556
ANKRD37	0.17271609	1.127178572	4.329594849	2.05E-05	0.000222413	0.107501134	1.077360543	4.524879725	8.12E-06	0.000152942
ANO7	0.093401452	1.066882616	4.001031406	7.98E-05	0.000706169	0.101983961	1.073248355	4.397662424	1.43E-05	0.000245118
ANTXR2	0.177347745	1.130803101	6.150376873	2.50E-09	8.29E-08	0.122042637	1.088274604	5.997331838	4.72E-09	2.77E-07
ARHGAP19	0.128541933	1.093188306	5.633869829	4.10E-08	9.67E-07	0.060538818	1.042855174	3.79454163	0.000172403	0.001818891
ARID4A	0.078770827	1.056117847	3.729865936	0.000229583	0.001728025	0.062753195	1.04445707	3.724469238	0.000225804	0.00224404
ARNTL	0.077498448	1.055186819	4.150248844	4.35E-05	0.000424794	0.105821071	1.076106654	5.110912101	5.12E-07	1.54E-05
ATF3	0.192376677	1.142644544	3.71259996	0.000245077	0.001822696	0.402352716	1.321661491	9.92633625	9.00E-21	2.30E-18
ATP6V1F	-0.089599337	0.939783708	-5.656464306	3.64E-08	8.79E-07	-0.089599337	0.961284253	-3.463365081	0.000595061	0.00485921
ATPAF1	-0.073672061	0.950216352	-3.99988055	8.01E-05	0.00070889	-0.064855686	0.956040946	-4.070990188	5.71E-05	0.000758148
BAZ1A	0.074830962	1.053237623	3.207162652	0.001487371	0.008220651	0.093386614	1.066871643	4.589957134	6.06E-06	0.000119581
BCL3	0.239372378	1.180479001	6.103909899	3.24E-09	1.04E-07	0.099144323	1.071137971	3.292867123	0.001085954	0.007829639

BSC12	-0.19840344	0.871514492	-5.868162062	1.18E-08	3.20E-07	-0.107471522	0.928213431	-3.947405377	9.43E-05	0.00113083
BTG2	0.317979002	1.246583051	10.29838022	1.85E-21	1.16E-18	0.580118403	1.494971937	15.99920551	2.74E-44	2.14E-41
C10orf59	-0.158281039	0.896092123	-5.486518069	8.81E-08	1.89E-06	-0.072477235	0.951003638	-3.68994754	0.000257517	0.002476517
C12orf10	-0.086294318	0.941939093	-4.979681707	1.08E-06	1.74E-05	-0.07205218	0.951283869	-4.289748921	2.28E-05	0.000360624
C12orf52	-0.086294318	0.941939093	-4.979681707	1.08E-06	1.74E-05	-0.07205218	0.951283869	-4.289748921	2.28E-05	0.000360624
C13orf18	0.440171348	1.35676546	8.548328088	6.77E-16	1.16E-13	0.187277971	1.13861339	4.8072306	2.22E-06	5.18E-05
C16orf7	0.174663087	1.128700788	8.090312857	1.55E-14	1.90E-12	0.09825619	1.070478774	4.426983893	1.25E-05	0.000219117
C17orf101	-0.130454337	0.913543709	-5.174329622	4.23E-07	7.47E-06	-0.057615887	0.960850654	-3.309233856	0.001026123	0.00748459
C3orf62	0.129900536	1.094218259	5.19385354	3.84E-07	6.90E-06	0.088406916	1.063195509	4.597797245	5.85E-06	0.00011629
C5orf5	0.157784854	1.115572947	6.439594797	4.83E-10	1.92E-08	0.083170164	1.059343276	5.789485938	1.49E-08	7.56E-07
C5orf54	-0.112721816	0.924841591	-4.320203558	2.13E-05	0.000229811	-0.089628436	0.939764753	-4.20260421	3.30E-05	0.000485327
C7orf43	0.161297182	1.118292185	6.292869891	1.12E-09	4.00E-08	0.101608485	1.072969067	5.209504439	3.13E-07	1.02E-05
C7orf50	-0.235472322	0.849406868	-6.936902928	2.53E-11	1.48E-09	-0.145898378	0.903816389	-6.128250632	2.25E-09	1.44E-07
C8orf55	-0.11191407	0.925359543	-3.556928637	0.000436758	0.002956334	-0.092692092	0.937771219	-4.065064582	5.85E-05	0.000772729
CALN1	-0.080819265	0.94552056	-4.500936477	9.74E-06	0.000115383	-0.054749069	0.962761884	-3.434654998	0.000659637	0.005242707
CAPG	-0.16007424	0.894979015	-5.987681627	6.15E-09	1.82E-07	-0.087814056	0.940947375	-3.291216034	0.001092166	0.007865358
CCL3	0.38427235	1.305201319	7.108286426	8.83E-12	5.78E-10	1.350292888	2.549638815	18.66363469	1.89E-55	3.94E-52
CCL3L1	0.396937255	1.316709655	6.695411776	1.08E-10	5.17E-09	1.183835398	2.271799317	16.59021024	9.55E-47	8.53E-44
CCL3L3	0.365258445	1.288112362	6.653247048	1.39E-10	6.42E-09	1.356130877	2.559977051	18.18283748	2.01E-53	3.58E-50
CCL4L1	0.457586749	1.373242821	4.221349367	3.23E-05	0.000328203	0.611835011	1.528201743	8.981062111	1.32E-17	2.47E-15
CCL8	0.443291864	1.359703288	4.679551789	4.38E-06	5.80E-05	0.30255706	1.233328452	5.075349313	6.10E-07	1.76E-05
CCNG1	-0.149122761	0.901798639	-6.072737251	3.85E-09	1.20E-07	-0.089554517	0.939812905	-4.530583694	7.92E-06	0.00014953
CD44	0.139235411	1.101321291	3.642123264	0.000319136	0.002274711	0.201566466	1.149946279	6.311093458	7.82E-10	5.53E-08
CDK4	-0.199216252	0.871023621	-12.63759225	1.43E-29	2.99E-26	-0.070434918	0.952350857	-4.043999928	6.38E-05	0.000827016
CEBPD	0.305118352	1.235519989	6.297963502	1.09E-09	3.92E-08	0.100837452	1.072395784	4.908522132	1.37E-06	3.56E-05
CHD4	0.101034254	1.072542082	6.14094502	2.64E-09	8.65E-08	0.050802633	1.035841046	3.737161807	0.000215099	0.002161709
CHMP4A	-0.085559725	0.942418833	-4.873877062	1.79E-06	2.65E-05	-0.085559725	0.942418833	-4.873877062	1.79E-06	2.65E-05
CHSY1	0.103633518	1.074476193	5.740719898	2.33E-08	5.89E-07	0.103633518	1.074476193	5.740719898	2.33E-08	5.89E-07
CKLF	0.074151743	1.052741877	3.477736813	0.000581543	0.003753458	0.050100111	1.035336765	3.260562118	0.001213668	0.008541134
COMMD1	-0.082609651	0.944347896	-4.604258254	6.15E-06	7.78E-05	-0.047869247	0.967363999	-3.71226477	0.000236569	0.002332486
COPE	-0.075498487	0.949014157	-4.5646801	7.34E-06	9.05E-05	-0.065378476	0.955694568	-4.605004898	5.66E-06	0.000113709

CSNK1D	0.108421214	1.078047849	4.826411032	2.23E-06	3.22E-05	0.065883588	1.046725817	3.490105454	0.000540274	0.004500007
CUTA	-0.108198671	0.927745709	-5.822249075	1.51E-08	3.98E-07	-0.057230143	0.961107598	-3.528101273	0.000470499	0.004017879
CXCL1	0.208085468	1.155154216	3.718390564	0.000239774	0.001786445	0.198932598	1.147848786	5.388836063	1.26E-07	4.79E-06
CY5R1	-0.098718605	0.933862075	-3.406825538	0.000748195	0.004646763	-0.093376272	0.937326599	-4.823836772	2.05E-06	4.87E-05
DDB1	-0.125380561	0.916762183	-6.437434951	4.89E-10	1.94E-08	-0.059148032	0.95983077	-4.002319239	7.56E-05	0.000937202
DDOST	-0.101472284	0.932081308	-6.219947453	1.69E-09	5.86E-08	-0.057537999	0.960902529	-3.678439906	0.000268988	0.00256318
DKFZP586I1420	0.127170188	1.092149374	3.999501173	8.02E-05	0.000708965	0.061911947	1.043848215	3.211191243	0.001435988	0.009815595
DLG4	0.185386394	1.137121485	5.193134341	3.85E-07	6.91E-06	0.125289074	1.090726261	5.017737027	8.09E-07	2.25E-05
DPH5	-0.080067353	0.946013481	-3.677591437	0.000279567	0.002037985	-0.106135083	0.929073679	-5.056742829	6.69E-07	1.91E-05
DPP7	-0.18572505	0.879207105	-5.217748514	3.41E-07	6.20E-06	-0.086494053	0.941808695	-3.248800407	0.001263528	0.008824934
DUSP2	0.251213063	1.190207458	4.527844672	8.65E-06	0.000104142	0.267930924	1.204079729	8.267138396	2.41E-15	3.83E-13
DUSP5	0.345577117	1.270659179	5.615939962	4.50E-08	1.05E-06	0.248670417	1.18811165	6.113623253	2.45E-09	1.55E-07
DUSP6	0.617173415	1.533867023	10.84644877	2.66E-23	2.56E-20	0.127606397	1.092479643	4.585820364	6.17E-06	0.000121206
DYRK4	-0.083253511	0.943926537	-3.277634972	0.00117149	0.006764882	-0.065051267	0.955911348	-3.570305093	0.000402929	0.003525139
ECE2	-0.096879762	0.935053124	-3.192732554	0.001561088	0.008518869	-0.082940526	0.94413134	-3.565808922	0.000409669	0.003569116
EGR1	0.599880182	1.51559069	9.430304225	1.24E-18	4.43E-16	1.258557259	2.392563572	19.80372323	2.96E-60	9.25E-57
EGR2	0.202074918	1.150351628	4.861143979	1.90E-06	2.79E-05	1.419755997	2.675402581	20.29344534	2.56E-62	1.07E-58
EI24	-0.079329175	0.946497648	-4.519105676	8.99E-06	0.000107518	-0.051303562	0.965063941	-3.457970981	0.000606724	0.004919106
ENOPH1	-0.074301387	0.949801943	-4.475165863	1.09E-05	0.000127401	-0.059563646	0.9595543	-4.272964366	2.45E-05	0.000380763
EPRS	-0.15026855	0.901082715	-5.932946066	8.30E-09	2.39E-07	-0.061128713	0.958513919	-4.263150673	2.55E-05	0.000393711
ESYT1	-0.190315618	0.876413968	-9.160527393	8.84E-18	2.63E-15	-0.072486285	0.950997672	-4.392510335	1.46E-05	0.000250022
ETFB	-0.072510777	0.950981528		0.001029572	0.00608304	-0.093150543	0.937473267		1.81E-07	6.53E-06
EXOSC8	-0.083520291	0.943752005	-3.929664884	0.000105948	0.000896631	-0.081954207	0.944777029	-4.589360716	6.07E-06	0.000119581
FAHD1	-0.07766145	0.947592411	-3.285440488	0.001140629	0.006635713	-0.095970654	0.93564253	-4.476082801	1.01E-05	0.000183254
FAM100B	0.212890808	1.159008228	7.558018214	5.16E-13	4.48E-11	0.137711156	1.100158323	5.632013658	3.50E-08	1.60E-06
FAM118B	-0.039101255	0.973261064	-2.099472163	0.036621846	0.103678967	-0.074048542	0.949968419	-3.367241862	0.000837856	0.00638323
FAM195A	-0.100127511	0.93295053	-3.657724447	0.000301123	0.002167319	-0.105636622	0.929394736	-4.066454887	5.82E-05	0.000770772
FBXO6	-0.13334427	0.911715577	-5.566207073	5.84E-08	1.33E-06	-0.082624987	0.944337858	-3.373696546	0.000819025	0.006262664
FBXW4	-0.086993261	0.941482863	-4.159134352	4.19E-05	0.000412415	-0.06923469	0.95314348	-3.66070969	0.000287609	0.002703522
FCGR2A	0.32179637	1.249885874	5.160308831	4.53E-07	7.90E-06	0.117075212	1.084533947	4.202750242	3.30E-05	0.000485327
FGD4	0.114919685	1.082914758	3.898180416	0.000119935	0.000995637	0.155052231	1.113461929	8.36898061	1.16E-15	1.94E-13

FOS	0.607372682	1.52348224	12.69986367	8.57E-30	2.14E-26	0.673150675	1.59455148	18.78229875	5.99E-56	1.50E-52
FOSB	0.139458541	1.101491637	3.227001728	0.001391276	0.007765888	1.072955623	2.103738847	16.79284667	1.36E-47	1.31E-44
FPR2	0.241812782	1.18247754	3.634792169	0.000327947	0.002325577	0.137361934	1.099892049	3.936734577	9.85E-05	0.001174557
FTSJ2	-0.076121105	0.948604682	-3.340020497	0.000945058	0.005664003	-0.083432251	0.943809598	-4.214313827	3.14E-05	0.000464933
FUCA1	-0.210440731	0.864273163	-3.672468488	0.000284982	0.002072625	-0.139875517	0.907597464	-4.562902241	6.85E-06	0.000131676
FUT4	0.083736683	1.059759341	4.226694855	3.16E-05	0.000322511	0.115221443	1.083141287	5.858180876	1.02E-08	5.43E-07
GABARAPL1	0.116479255	1.084086034	5.081546127	6.64E-07	1.12E-05	0.209678591	1.156430522	7.69540838	1.26E-13	1.64E-11
GALIG	-0.286607221	0.819827778	-6.488811919	3.63E-10	1.50E-08	-0.079678483	0.946268507	-3.329186033	0.000957329	0.007077784
GALK1	-0.12262555	0.918514531	-6.161118128	2.35E-09	7.89E-08	-0.044274495	0.969777377	-3.210798353	0.0014379	0.00982329
GNPDA1	-0.080019859	0.946044624	-3.310231335	0.00104755	0.006177582	-0.07734392	0.947800995	-4.305833639	2.13E-05	0.000340155
GSTP1	-0.146655732	0.903342047	-6.930011316	2.63E-11	1.53E-09	-0.076741426	0.948196895	-4.838159566	1.92E-06	4.62E-05
GTPBP6	-0.095082032	0.936219012	-4.005697416	7.83E-05	0.000697101	-0.09003803	0.939497983	-4.428348747	1.25E-05	0.000218109
H3F3B	0.272530861	1.207924984	9.179393049	7.71E-18	2.41E-15	0.231557338	1.174101667	13.2209369	5.06E-33	2.34E-30
HBEGF	0.76361341	1.697737499	10.26440275	2.40E-21	1.43E-18	0.546514932	1.460553224	12.21082218	4.22E-29	1.51E-26
HDDC3	-0.08217459	0.944632718	-3.739321844	0.000221494	0.001677239	-0.082304525	0.944547644	-4.780695413	2.51E-06	5.72E-05
HDHD2	-0.090442368	0.939234711	-4.118348867	4.96E-05	0.000471872	-0.071304686	0.951776879	-3.717504091	0.00023189	0.00229904
HEATR1	-0.073536338	0.950305749	-3.514536055	0.000509426	0.00335379	-0.107852143	0.927968576	-4.336499811	1.86E-05	0.000307164
HEBP1	-0.240535578	0.84643103	-8.917098822	5.06E-17	1.09E-14	-0.066761639	0.954778749	-4.30180895	2.16E-05	0.000345477
HECA	0.107416644	1.07729745	3.952383836	9.68E-05	0.000831447	0.067760897	1.048088757	3.574215195	0.000397153	0.003484356
HMG2	-0.078167397	0.947260153	-3.284264147	0.001145231	0.00664702	-0.063817873	0.956728929	-3.248606943	0.001264364	0.008825841
IARS	-0.159480841	0.895347207	-3.828475122	0.000157377	0.001248428	-0.031125924	0.978656226	-2.011458458	0.044992061	0.135409424
IDH1	-0.140574103	0.907158091	-6.634017257	1.55E-10	7.08E-09	-0.057706131	0.960790551	-3.782111794	0.00018091	0.001888821
IER2	0.13043528	1.094623913	5.14783564	4.81E-07	8.38E-06	0.549308043	1.463383647	14.72511368	4.73E-39	2.82E-36
IGFBP6	0.369741009	1.29212085	6.313516874	9.96E-10	3.62E-08	0.084196228	1.060096963	3.815459833	0.000158934	0.001707035
IIP45	0.10876382	1.078303891	3.18207532	0.001617687	0.008793184	0.088757659	1.063454021	3.533027491	0.000462097	0.003959656
IL1R2	0.535136879	1.449079633	6.47478239	3.94E-10	1.61E-08	0.371667432	1.293847364	5.229013227	2.84E-07	9.49E-06
IL1RN	0.439358621	1.356001356	5.922585133	8.78E-09	2.51E-07	0.080060824	1.057062605	3.58684789	0.000379017	0.003367428
IMP4	-0.105262596	0.929635717	-4.660880202	4.77E-06	6.22E-05	-0.061355292	0.958363394	-3.423122372	0.000687373	0.005428638
INSIG1	0.193337718	1.143405962	3.713048242	0.000244662	0.001821781	0.169977104	1.12504063	4.859926899	1.73E-06	4.25E-05
INTS3	0.103182485	1.07414033	5.160299818	4.53E-07	7.90E-06	0.086771678	1.061991102	5.234630776	2.76E-07	9.27E-06
IQSEC1	0.12637329	1.091546273	5.633176387	4.12E-08	9.69E-07	0.062226696	1.044075974	3.914810181	0.00010746	0.001260318

ITPRIP	0.150137503	1.10967523	5.616852915	4.48E-08	1.05E-06	0.12930644	1.093767758	6.8158206	3.75E-11	3.76E-09
JUNB	0.303513913	1.234146716	8.533676014	7.49E-16	1.27E-13	0.528021491	1.441950351	14.33023008	1.89E-37	1.03E-34
JUND	0.091852088	1.065737466	4.325519724	2.08E-05	0.000225438	0.190486606	1.141148549	10.46591196	1.16E-22	3.31E-20
KDM6B	0.134598218	1.097787044	3.779738623	0.000189856	0.001467891	0.135263623	1.098293486	4.643552159	4.74E-06	9.87E-05
KIAA0247	0.150819664	1.11020005	6.861205738	4.00E-11	2.21E-09	0.067099528	1.047608396	3.713980573	0.000235027	0.002322776
KLK7	0.097379743	1.069828649	4.375426099	1.68E-05	0.000187718	0.109934104	1.079178943	5.125490873	4.76E-07	1.46E-05
LCTL	-0.073382755	0.95040692	-3.524884704	0.000490709	0.003251231	-0.077897206	0.947437574	-3.830133355	0.000150085	0.00162456
LGALS3	-0.302035982	0.811106925	-8.011439364	2.63E-14	3.01E-12	-0.095920296	0.935675189	-3.766314934	0.000192294	0.001973778
LHPP	-0.187064511	0.87839119	-4.410614108	1.44E-05	0.000164483	-0.123066078	0.918234104	-5.12094427	4.87E-07	1.48E-05
LILRB2	0.281246918	1.215244764	5.874882157	1.14E-08	3.10E-07	0.07711268	1.054904706	4.273221879	2.45E-05	0.000380763
LRRC41	-0.111440257	0.925663501	-3.729580825	0.000229831	0.001728852	-0.084673072	0.942998204	-3.586684787	0.000379246	0.003367428
LRRC42	-0.081547692	0.945043281	-4.421582938	1.38E-05	0.000157415	-0.052551539	0.964229491	-3.385452136	0.000785739	0.006048832
LRRC8C	0.15506471	1.11347156	4.456437389	1.18E-05	0.000136621	0.148366148	1.108313596	5.092897854	5.60E-07	1.66E-05
LSMD1	-0.08660218	0.941738111	-4.270120473	2.63E-05	0.000274272	-0.065416821	0.955669167	-3.590226823	0.0003743	0.003349675
LYN	0.124278318	1.089962363	5.19724828	3.78E-07	6.81E-06	0.110701754	1.079753321	6.094186571	2.73E-09	1.72E-07
MACROD1	-0.156854275	0.896978758	-4.67686575	4.43E-06	5.84E-05	-0.07415812	0.949896268	-3.334758741	0.000938896	0.006982795
MAFB	0.144881451	1.105639797	3.313932327	0.001034277	0.006107949	0.21383436	1.159766491	8.72348876	8.92E-17	1.56E-14
MAP1LC3A	0.428650969	1.345974399	8.976695553	3.31E-17	7.80E-15	0.193058166	1.143184425	4.721697731	3.31E-06	7.22E-05
MAP3K7IP2	0.086358869	1.06168727	3.27720179	0.001173225	0.006771774	0.083928212	1.059900042	3.738332282	0.000214136	0.002159982
MAPKAPK2	0.088045712	1.062929353	3.230745927	0.001373798	0.007690295	0.096529561	1.069198383	4.088519704	5.31E-05	0.000712153
MCL1	0.113188597	1.081616149	4.497360535	9.89E-06	0.000116992	0.242797132	1.18328462	10.53243128	6.75E-23	2.01E-20
MCTP2	0.160146787	1.117400822	4.228528075	3.14E-05	0.000320567	0.15025669	1.109766908	3.724563015	0.000225723	0.00224404
MFNG	-0.154402077	0.89850468	-6.075223264	3.80E-09	1.19E-07	-0.063995929	0.956610857	-4.649530344	4.62E-06	9.64E-05
MGAM	0.098685744	1.07079755	3.32953704	0.000980012	0.005845474	0.184650242	1.136541404	4.182544336	3.59E-05	0.000518822
MIDN	0.125505973	1.090890256	5.564850505	5.88E-08	1.33E-06	0.156433573	1.114528549	8.266422367	2.42E-15	3.83E-13
MRPL48	-0.104044308	0.930421082	-3.66205612	0.000296293	0.002141191	-0.076004498	0.948681358	-4.005017281	7.48E-05	0.000929398
MSL3	0.097200767	1.069695937	3.910750445	0.000114153	0.000952697	0.062734517	1.044443548	3.926668085	0.000102499	0.00121349
MUSK	-0.094047769	0.936890425	-4.882702196	1.71E-06	2.57E-05	-0.061788393	0.958075733	-3.416592166	0.000703557	0.005528514
MXD1	0.122354214	1.088509662	3.19508589	0.00154884	0.008470515	0.238570051	1.179822682	6.647594105	1.05E-10	9.27E-09
MYST3	0.10262168	1.073722871	3.367407341	0.000859143	0.005229313	0.133614279	1.097038593	5.215322173	3.04E-07	1.01E-05
NDUFAF2	-0.106635181	0.928751679	-4.894592217	1.62E-06	2.44E-05	-0.065102849	0.955877171	-3.695443793	0.000252201	0.002446978

NDUFS3	-0.110578468	0.926216608	-4.935707217	1.34E-06	2.07E-05	-0.114339926	0.923804881	-8.126974477	6.46E-15	9.85E-13
NENF	-0.156982628	0.896898959	-5.421725918	1.23E-07	2.52E-06	-0.074490091	0.949677717	-3.234726814	0.001325682	0.00916686
NFKBIZ	0.347874164	1.272683923	7.267250879	3.28E-12	2.38E-10	0.45296965	1.368855016	17.01467971	1.61E-48	1.83E-45
NFX1	-0.089432833	0.939892177	-5.033396996	8.38E-07	1.38E-05	-0.056539121	0.961568059	-3.622581058	0.000331836	0.003048213
NIT2	-0.101571536	0.932017187	-4.748863094	3.19E-06	4.42E-05	-0.086244685	0.941971499	-4.765017102	2.70E-06	6.07E-05
NLRP3	0.221092397	1.165615847	4.100077147	5.34E-05	0.000502789	0.076727127	1.054622826	4.343716761	1.81E-05	0.000300174
NMRAL1	-0.085638949	0.942367083	-3.353984697	0.000900298	0.005442712	-0.080977831	0.945416644	-4.640768734	4.81E-06	9.96E-05
NPTN	0.099185878	1.071168824	6.70178539	1.04E-10	5.00E-09	0.043258145	1.030438316	3.398397344	0.000750544	0.005817299
NR2C2AP	-0.100623338	0.932629948	-3.917973783	0.000110951	0.000929187	-0.088165754	0.940718021	-4.161258603	3.93E-05	0.000558092
NSMCE2	-0.152545494	0.899661697	-6.588525854	2.03E-10	8.90E-09	-0.059179036	0.959810143	-4.029542009	6.77E-05	0.000864092
NUBP1	-0.085481669	0.942469823	-4.02009873	7.39E-05	0.000663469	-0.052435844	0.96430682	-4.081918351	5.46E-05	0.000730235
OSM	0.321101239	1.24928379	5.800203377	1.70E-08	4.42E-07	0.700639974	1.625225576	15.24872599	3.42E-41	2.25E-38
PDCL3	-0.082740008	0.944262572	-3.824633135	0.000159733	0.001265513	-0.050043586	0.965907147	-3.267262309	0.001186087	0.008401392
PDE4B	0.327127017	1.254512649	5.714525947	2.68E-08	6.72E-07	0.160562852	1.117723121	4.065153201	5.85E-05	0.000772729
PDIAS	-0.193318073	0.874591921	-5.466876833	9.74E-08	2.06E-06	-0.095870481	0.935707498	-4.398492832	1.42E-05	0.000244593
PDLIM4	0.178257976	1.131516777	3.871595217	0.000133091	0.001088233	0.068099831	1.048335015	3.27579928	0.001151787	0.008233069
PDS5B	0.079997806	1.057016433	3.381533147	0.000817731	0.005013863	0.06686481	1.047437971	3.764787918	0.00019343	0.001983805
PDXP	-0.118804266	0.920950636	-5.028452585	8.58E-07	1.41E-05	-0.089541741	0.939821228	-4.275920652	2.42E-05	0.000377386
PEMT	-0.137906939	0.908836739	-5.568717429	5.76E-08	1.32E-06	-0.068638674	0.953537331	-3.740529268	0.00021234	0.002149535
PEPD	-0.130715773	0.913378178	-6.822591139	5.05E-11	2.71E-09	-0.048453321	0.966972442	-3.315473055	0.001004132	0.007345616
PHACTR2	0.114677963	1.082733332	4.647679352	5.06E-06	6.57E-05	0.096806678	1.069403778	4.486815565	9.63E-06	0.0001754
PIK3CD	0.075858421	1.053987985	3.304209788	0.001069486	0.006295061	0.063236491	1.044807017	3.651845782	0.000297366	0.002776453
PIK3CG	0.128019611	1.092792593	3.948743786	9.82E-05	0.000840657	0.102561997	1.073678453	3.896477026	0.000115579	0.001336713
PLCB2	0.14419825	1.105116335	4.633572923	5.39E-06	6.94E-05	0.11826077	1.085425547	5.143517986	4.35E-07	1.36E-05
PLEK	0.183221455	1.135416376	5.253313602	2.86E-07	5.31E-06	0.083788268	1.059797234	3.292007573	0.001089184	0.007848401
PLEKHG2	0.162183288	1.118979254	4.789346908	2.65E-06	3.75E-05	0.088080544	1.062955016	3.909007539	0.00010997	0.001282742
PMAIP1	0.156305945	1.114429957	4.084295661	5.70E-05	0.000529856	0.340874612	1.266524172	8.756108303	7.02E-17	1.25E-14
PNRC1	0.111342396	1.080232902	4.014727395	7.55E-05	0.000675048	0.189766999	1.140579493	8.085652817	8.63E-15	1.28E-12
POFUT2	-0.081974139	0.944763976	-4.229119756	3.13E-05	0.000320035	-0.057976816	0.960610301	-3.34313745	0.000911801	0.006834137
POLR1C	-0.074944427	0.94937869	-3.623946854	0.000341401	0.002407333	-0.094174239	0.936808299	-5.554022368	5.30E-08	2.26E-06
PPA2	-0.07420225	0.949867213	-3.287428391	0.001132891	0.006596835	-0.082983799	0.944103021	-5.08803853	5.73E-07	1.68E-05

PPM1B	0.123715347	1.089537118	3.907006002	0.000115847	0.000964904	0.197387686	1.146620268	6.837722535	3.28E-11	3.33E-09
PPP1R14A	0.101993702	1.073255601	4.513812499	9.20E-06	0.000109745	0.096762875	1.069371309	3.737777955	0.000214592	0.002160668
PRDX4	-0.122274476	0.918738075	-5.354852024	1.72E-07	3.40E-06	-0.063036505	0.957247236	-3.935635899	9.89E-05	0.001178603
PRKCA	0.168047696	1.123537047	4.118823258	4.95E-05	0.000471313	0.117445353	1.084812234	3.731002385	0.000220233	0.00219916
PRPF38B	0.074819111	1.053228971	3.887352861	0.000125137	0.001029932	0.082492927	1.05884611	4.870438567	1.64E-06	4.10E-05
PSCD4	0.16455209	1.120818046	6.458496931	4.33E-10	1.75E-08	0.085713665	1.061212567	3.780685422	0.000181912	0.001890489
PSMG1	-0.163159796	0.893066929	-6.982837056	1.91E-11	1.15E-09	-0.055318577	0.962381906	-3.34189826	0.000915762	0.006855604
PTGER4	0.168539459	1.123920086	4.900698401	1.58E-06	2.38E-05	0.126426806	1.091586764	5.544644821	5.57E-08	2.34E-06
PTGES2	-0.079042844	0.946685517	-3.526549762	0.000487758	0.003241867	-0.129356795	0.91423896	-7.036804222	9.41E-12	1.01E-09
PTGS2	0.141803996	1.103283838	3.516518304	0.00050579	0.003333361	0.885610294	1.847546011	18.06600062	6.22E-53	9.72E-50
PTPN1	0.076072969	1.054144738	4.045351584	6.67E-05	0.000604506	0.05852511	1.041400576	3.959030897	9.00E-05	0.001088681
RARA	0.204796892	1.152524078	5.642775463	3.91E-08	9.30E-07	0.080018282	1.057031435	4.019030828	7.06E-05	0.000892163
RFX2	0.122455843	1.088586344	3.959551171	9.41E-05	0.000812012	0.225426628	1.169122926	6.070595993	3.12E-09	1.94E-07
RGL2	0.130432094	1.094621497	5.221786219	3.34E-07	6.10E-06	0.122475235	1.088600976	5.925625387	7.05E-09	3.86E-07
RGS2	0.229580862	1.172494261	4.696722507	4.05E-06	5.45E-05	0.168739653	1.124076056	8.334394873	1.49E-15	2.42E-13
RNF113A	-0.082422209	0.944470598	-3.258936807	0.001248599	0.007095446	-0.116217893	0.92260314	-5.092753527	5.60E-07	1.66E-05
RNF149	0.096919046	1.069487074	3.731752536	0.000227947	0.001717781	0.131518445	1.095446058	4.738500744	3.06E-06	6.76E-05
RNF217	0.127029555	1.092042917	5.112944546	5.70E-07	9.74E-06	0.084240061	1.060129172	3.81238199	0.000160851	0.001718771
RNPEP	-0.177302645	0.884354898	-4.931097549	1.37E-06	2.10E-05	-0.11881042	0.920946708	-3.65914325	0.000289311	0.002715439
RNU2-1	0.089136211	1.0637331	3.154657464	0.001772137	0.009435798	0.232229619	1.174648913	4.8201538	2.09E-06	4.92E-05
RPP21	-0.094224611	0.93677559	-4.38143606	1.64E-05	0.000183906	-0.056630747	0.961506991	-3.770796441	0.000188998	0.001951156
RPUSD3	-0.090199345	0.939392939	-5.022377427	8.84E-07	1.45E-05	-0.057699648	0.960794869	-4.009102015	7.36E-05	0.000916105
S100A6	-0.099892632	0.933102432	-5.116743895	5.60E-07	9.60E-06	-0.053921892	0.963314047	-3.269435636	0.001177266	0.008376881
SARS2	-0.106524186	0.928823136	-4.087708421	5.62E-05	0.000523705	-0.092005007	0.93821794	-3.362818804	0.000850992	0.006467541
SEC11C	-0.119082005	0.920773358	-4.287702423	2.45E-05	0.000257837	-0.100547919	0.932678703	-4.750360269	2.90E-06	6.43E-05
SERPINB6	-0.165039723	0.891903962	-6.598549199	1.91E-10	8.45E-09	-0.072064957	0.951275444	-4.208462677	3.22E-05	0.000476011
SERTAD1	0.084364397	1.060220541	3.98495583	8.51E-05	0.000743052	0.074447725	1.052957878	4.179484188	3.64E-05	0.000524785
SH2B1	0.09856572	1.07070847	3.932551086	0.000104746	0.000889027	0.078067408	1.055603038	3.435970305	0.000656541	0.005225323
SLC18A1	0.098355691	1.070552606	3.791154669	0.000181724	0.001418174	0.0990115	1.071039361	3.338810689	0.000925701	0.006905097
SLC22A4	0.319186567	1.247626902	6.6158757	1.73E-10	7.74E-09	0.096331762	1.069051802	3.837675718	0.00014572	0.0015897
SLC25A25	0.091011409	1.065116626	3.779264106	0.000190201	0.001469652	0.100590778	1.072212439	4.019269151	7.06E-05	0.000892163

SLC25A37	0.192104326	1.142428857	4.991330908	1.03E-06	1.66E-05	0.171914461	1.126552432	4.10071437	5.05E-05	0.000685251
SLC39A11	-0.129511434	0.91414097	-4.785507913	2.70E-06	3.80E-05	-0.071631819	0.951561087	-3.913258903	0.000108125	0.001264532
SLC47A1	-0.438124158	0.73809368	-7.513785862	6.85E-13	5.79E-11	-0.153173451	0.899270189	-3.913505762	0.000108019	0.001264473
SLC7A1	-0.215612978	0.861180181	-5.23197469	3.18E-07	5.86E-06	-0.088604519	0.940431965	-4.202197849	3.31E-05	0.000485327
SMU1	-0.091258964	0.938703235	-3.685538694	0.000271358	0.00198809	-0.093463147	0.937270157	-3.996267862	7.75E-05	0.000954403
SNF8	-0.109213554	0.927093304	-3.561845788	0.000428989	0.002913213	-0.090036648	0.939498883	-3.594467712	0.000368457	0.003316378
SNTA1	-0.101696995	0.93193614	-4.957948309	1.20E-06	1.89E-05	-0.079569109	0.946340249	-4.281244365	2.36E-05	0.000371664
SNTB1	-0.211121373	0.863865508	-6.269608528	1.28E-09	4.51E-08	-0.07764309	0.947604471	-3.247651786	0.001268498	0.008845789
SON	0.075373826	1.053634015	3.141570888	0.001850561	0.009790825	0.254330085	1.192781747	11.63066244	6.57E-27	2.16E-24
SORL1	0.217433749	1.162663612	4.243383738	2.95E-05	0.000302432	0.155869881	1.114093164	5.317985172	1.81E-07	6.53E-06
SP100	0.074333565	1.052874561	3.147790262	0.001812899	0.009628234	0.10708263	1.077048062	4.86147341	1.72E-06	4.23E-05
SPATA2L	0.077883117	1.055468203	3.306623063	0.001060644	0.006248902	0.082802203	1.059073123	3.657107	0.000291538	0.00273019
SRGN	0.120913519	1.087423204	3.566045338	0.000422457	0.002875101	0.091791169	1.065692465	5.033841392	7.48E-07	2.12E-05
SSH1	0.117886582	1.08514406	3.275325526	0.001180769	0.006801375	0.092150307	1.065957787	3.528921079	0.000469091	0.004011335
SSR4	-0.154674864	0.898334805	-7.311714215	2.48E-12	1.87E-10	-0.081743484	0.944915035	-5.285984039	2.13E-07	7.53E-06
STRA13	-0.102395792	0.931484849	-4.550799609	7.81E-06	9.54E-05	-0.068303416	0.953758943	-4.469907997	1.04E-05	0.000186722
STX8	-0.106395069	0.928906267	-4.97611805	1.10E-06	1.76E-05	-0.088080028	0.94077392	-4.768060974	2.67E-06	6.01E-05
TCEB2	-0.12807382	0.915052346	-7.164054602	6.25E-12	4.24E-10	-0.053410397	0.963655642	-3.897313069	0.000115197	0.001335985
TGFA	0.207188734	1.154436432	4.902585253	1.56E-06	2.36E-05	0.25810278	1.195904992	7.682987411	1.37E-13	1.77E-11
THOC6	-0.102747106	0.931258048	-4.935452565	1.34E-06	2.07E-05	-0.050463218	0.965626238	-3.313130403	0.001012337	0.007396983
TLE4	0.099582303	1.071463202	3.962745287	9.29E-05	0.000803427	0.095692412	1.068578142	6.151186144	1.97E-09	1.28E-07
TLR1	0.212698796	1.158853983	5.920077987	8.90E-09	2.54E-07	0.144246725	1.105153468	5.979914611	5.21E-09	3.01E-07
TLR6	0.118636299	1.085708117	5.635337649	4.07E-08	9.62E-07	0.191448304	1.141909489	9.762034106	3.30E-20	8.08E-18
TMED3	-0.156932298	0.89693025	-6.041643793	4.57E-09	1.40E-07	-0.077397534	0.947765773	-3.694631609	0.00025298	0.002449853
TMEM108	-0.083008478	0.944086871	-3.226132034	0.001395365	0.007784405	-0.075176839	0.949225762	-3.406084436	0.000730346	0.00570318
TMEM119	0.407320849	1.326220673	4.852267483	1.98E-06	2.90E-05	0.090267444	1.064567511	3.323504339	0.000976469	0.007198008
TMEM126B	-0.09773921	0.934496257	-4.190760703	3.67E-05	0.000366626	-0.073910422	0.950059371	-3.814685801	0.000159414	0.001709726
TMEM185B	0.087540945	1.062557523	4.512213377	9.26E-06	0.000110417	0.109293468	1.078699835	5.545711283	5.54E-08	2.33E-06
TMEM4	-0.077282717	0.947841204	-4.299799302	2.32E-05	0.000246188	-0.048000547	0.967275963	-3.318931382	0.000992132	0.007283404
TMEM43	0.113626321	1.081944369	5.403639932	1.34E-07	2.74E-06	0.080609124	1.057464421	5.069355037	6.28E-07	1.80E-05
TMEM86B	0.132776113	1.096401428	4.832430923	2.17E-06	3.16E-05	0.099500867	1.071402722	5.01787758	8.08E-07	2.25E-05

TMEM88	0.113122368	1.081566497	3.774864035	0.000193432	0.001488176	0.210288183	1.156919259	7.519166485	4.11E-13	4.98E-11
TMUB1	0.10526693	1.075693399	5.09535617	6.21E-07	1.06E-05	0.061799654	1.04376697	3.308876704	0.001027395	0.007485344
TNFAIP3	0.278513353	1.212944343	8.39573452	1.94E-15	3.11E-13	0.131558543	1.095476505	4.412551789	1.34E-05	0.000231533
TOMM40	-0.156370358	0.897279678	-4.358870061	1.81E-05	0.000199781	-0.067701725	0.9541568	-3.598877343	0.000362472	0.003281412
TP53INP2	0.071232699	1.050613989	4.410001098	1.45E-05	0.000164771	0.087800336	1.062748583	4.915240647	1.33E-06	3.47E-05
TRAPPC2L	-0.102562753	0.931377055	-3.813981748	0.000166441	0.001307883	-0.099801477	0.933161391	-5.347559655	1.55E-07	5.71E-06
TRAPPC6A	-0.139423253	0.907882027	-4.798217477	2.54E-06	3.61E-05	-0.0762047	0.948549719	-3.248868851	0.001263233	0.008824934
TRIB3	-0.505640758	0.70434748	-7.257304883	3.49E-12	2.46E-10	-0.097255745	0.93480947	-3.551400268	0.000431986	0.003732334
TSPAN4	-0.221314221	0.857783684	-4.710113765	3.81E-06	5.18E-05	-0.158522667	0.895942054	-5.253527858	2.51E-07	8.60E-06
TXNRD2	-0.150498275	0.900939244	-5.915606515	9.12E-09	2.58E-07	-0.067631696	0.954203117	-3.461327303	0.000599442	0.004875878
UBE2D4	-0.146220347	0.903614705	-6.845449803	4.40E-11	2.41E-09	-0.066175723	0.955166588	-3.609610983	0.000348285	0.003173654
UBP1	0.091088361	1.06517344	4.827129867	2.22E-06	3.22E-05	0.081511559	1.058126093	4.307660668	2.11E-05	0.000339171
UQCRC2	-0.123570753	0.91791295	-4.830210277	2.19E-06	3.18E-05	-0.060680077	0.958812035	-3.387712162	0.000779485	0.00601551
UROD	-0.131555255	0.912846852	-5.453197036	1.04E-07	2.19E-06	-0.061655979	0.958163672	-3.676231608	0.000271244	0.002572909
VARS	-0.085127761	0.94270105	-3.400475399	0.000765115	0.004728356	-0.084732456	0.942959389	-4.659160596	4.42E-06	9.25E-05
VNN3	0.161419074	1.118386673	3.457440708	0.000625299	0.003982418	0.2947784	1.226696541	6.390723	4.90E-10	3.74E-08
WASPIP	0.104509289	1.075128639	4.490045346	1.02E-05	0.00012036	0.091601082	1.065552061	4.799488687	2.30E-06	5.35E-05
WBP11	0.090806583	1.064965417	4.702803815	3.94E-06	5.33E-05	0.084585568	1.06038309	4.75980026	2.77E-06	6.20E-05
YARS	-0.157195994	0.896766323	-7.66595984	2.56E-13	2.36E-11	-0.040546757	0.972286397	-3.569282261	0.000404453	0.003533526
YIF1A	-0.107681134	0.928078579	-3.821679167	0.000161567	0.001276809	-0.079763628	0.946212662	-3.640561673	0.000310238	0.002884527
YPEL5	0.075428218	1.053673739	3.846044248	0.000147015	0.001178947	0.103422692	1.074319188	6.630585064	1.17E-10	1.01E-08
ZBTB24	-0.084531568	0.9430907	-4.770365716	2.89E-06	4.05E-05	-0.097970295	0.934346585	-6.759323447	5.32E-11	5.12E-09
ZBTB3	-0.104260947	0.930281378	-4.153533406	4.29E-05	0.000420087	-0.116240583	0.922588629	-5.281923335	2.17E-07	7.67E-06
ZEB2	0.10072671	1.072313469	3.421123906	0.000711368	0.004464619	0.15967798	1.11703778	6.970708709	1.43E-11	1.51E-09
ZMYND15	0.253099048	1.191764392	6.232534497	1.58E-09	5.49E-08	0.131169235	1.095180933	3.740695801	0.000212204	0.002149535
ZSWIM4	0.45012701	1.366160524	7.895154562	5.70E-14	5.99E-12	0.50124646	1.415435943	15.78706282	2.07E-43	1.52E-40

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^APlease see Methods for cut-off values for definition of differential expression. The differentially expressed MDM gene list contained 2171 genes compared to 1842 in the monocytes. Only those that display concordant differential expression in *TRIB1*^{High} versus *TRIB1*^{Low} cells are shown.

^BGrey highlighting indicates those Genes assigned by DAVID to the GO 0006954 ‘Inflammatory Response’ cluster. There was a 2.84-fold over-representation of these genes in this ‘Cluster of Terms but P values ($P= 6.96 \times 10^{-5}$, Benjamini-Hochberg adjusted P value 1.058×10^{-1}) were modest

Table 2. Top Ranking Biological Processes Enriched in Differentially Expressed Gene Lists of: (1) Human *TRIB1*^{High} versus *TRIB1*^{Low} monocytes and (2) between *TRIB1*^{High} versus *TRIB1*^{Low} Monocyte Derived Macrophages (MDMs).

Monocytes					Monocyte Derived Macrophages			
Cluster description ^C	Rank	Cluster Gene Ontology terms in differentially expressed gene-sets (DEG ^C)	Cluster enrichment in DEG of <i>TRIB1</i> ^{High} monocytes	p value ^D ranges	Rank	Cluster Gene Ontology terms in differentially expressed gene-sets (DEG ^C)	Cluster enrichment in DEG of <i>TRIB1</i> ^{High} MDMs	p value ^D ranges
Ribonucleoprotein Complex	1	0022613; 0042254; 0034660; 0016072; 0006364; 0034470	8.78	3.9 x 10 ⁻⁹ - 2.6 x 10 ⁻⁵	-	-	-	-
Oxoacid, Carboxylic & Fatty acid metabolism	-				1	0043436; 0019752; 0006631	8.28	7.9 x 10 ⁻⁸ - 3.3 x 10 ⁻³
Apoptosis & Cell Death	2	0006915 ^E ; 0012501; 0016265; 0008219	6.87	6.8 x 10 ⁻⁶ - 1.6 x 10 ⁻⁴	-	-	-	-
Signal transduction & Cell communication	-		-	-	2	0009966; 0010648; 0009968; 1902532	7.62	1.1 x 10 ⁻¹⁰ - 3.4 x 10 ⁻⁴
Regulation of Cell Death & Apoptosis	3	00043067 ^E ; 0042981 ^E ; 0043069 ^E ; 0060548 ^E ; 0043066 ^E ; 0043068 ^E ; 0010942 ^E ; 0043065 ^E ; 0010941; 0006916; 0006917; 0012502	6.03	6.5 x 10 ⁻⁷ - 5.2 x 10 ⁻³	4	0043067; 0042981; 0043069; 0006915; 0060548; 0043066; 0043068; 0010942; 0043065;	6.81	8.4 x 10 ⁻⁸ - 1.48 x 10 ⁻³
Response to unfolded proteins	13	0006986 ^F	2.53	8 x 10 ⁻³	3	0006986; 0034620; 0030968; 0036498; 0035967	6.91	9.0 x 10 ⁻⁸ - 1.48 x 10 ⁻⁴
Macromolecular Complex Subunit Organisation	4	0034621; 0034622; 0043933; 0065003; 0070271	5.72	7.33 x 10 ⁻⁶ - 4.82 x 10 ⁻²	-	-	-	-

^A Annotation was performed using the Database for Annotation, Visualization and Integrated Discovery (DAVID) Platform.

^B DEG lists, defined as in the Methods Section, comprised 1842 (monocytes) and 2171 (MDM) genes.

^C The monocyte and MDM DEG lists returned respectively 13 and 27 GO clusters with Benjamini-Hochberg adjusted P values > 5.0 x 10⁻²

^D Benjamini-Hochberg adjusted P values

^E GO term also present in MDM Cluster 4 of GO terms

^F GO term also present in MDM Cluster 3 of GO terms

STable. 3 The most significantly altered pathways in *TRIB1*^{HIGH} versus *TRIB1*^{LOW} macrophages.

Monocyte Derived Macrophages						Monocytes		
Pathway No.	Pathway Name	Ranking	Log. fold change	p value	FDR	Log. fold change	p value	FDR
645	Creation of C4 and C2 Activators	1	0.34	1.6 x 10 ⁻⁵	7.3 x 10 ⁻⁵	Not present		
199	Translocation of Zap 70 to Immunological Synapse	2	0.20	< 10 ⁻⁷	< 10 ⁻⁷	-0.03	0.45	0.54
380	PD1 Signaling	3	0.17	< 10 ⁻⁷	< 10 ⁻⁷	-0.02	0.60	0.67
197	Phosphorylation Of CD3 And TCR Zeta Chains	4	0.16	< 10 ⁻⁷	< 10 ⁻⁷	-0.03	0.46	0.54
222	HDL Mediated Lipid Transport	5	0.16	< 10 ⁻⁷	< 10 ⁻⁷	0.01	0.36	0.43
263	Chemokine Receptors Bind Chemokines	6	0.15	< 10 ⁻⁷	< 10 ⁻⁷	0.23	< 10 ⁻⁷	< 10 ⁻⁷
647	Initial Triggering of Complement	7	0.15	5.1 x 10 ⁻⁴	1.7 x 10 ⁻³	0.01	0.74	0.79
202	Generation of Second Messenger Molecules	8	0.13	< 10 ⁻⁷	< 10 ⁻⁷	-0.01	0.59	0.67
604	Lipoprotein Metabolism	9	0.11	< 10 ⁻⁷	< 10 ⁻⁷	Not present		
270	Norepinephrine Neurotransmitter Release Cycle	10	0.10	1.9 x 10 ⁻⁶	9.5 x 10 ⁻⁶	0.04	1 x 10 ⁻³	2 x 10 ⁻³
280	Steroid Hormones	11	0.09	< 10 ⁻⁷	< 10 ⁻⁷	-0.01	0.45	0.54
24	Metabolism of Steroid Hormones and Vitamins A and D	12	0.09	< 10 ⁻⁷	< 10 ⁻⁷	-0.01	0.22	0.29
246	Peptide Ligand Binding Receptors	13	0.09	< 10 ⁻⁷	< 10 ⁻⁷	0.11	< 10 ⁻⁷	< 10 ⁻⁷
405	Zinc Transporters	14	0.08	2.3 x 10 ⁻⁶	1.1 x 10 ⁻⁵	-0.02	0.03	0.05
607	Chylomicron Mediated Lipid Transport	15	0.08	6.2 x 10 ⁻⁴	2.0 x 10 ⁻³	-4.35x10 ⁻³	0.61	0.68
244	Mitochondrial fatty acid Beta oxidation	10	-0.07	1.8 x 10 ⁻⁷	1.0 x 10 ⁻⁶	-0.04	1.2 x 10 ⁻⁶	5.4 x 10 ⁻⁶
278	tRNA aminoacylation	9	-0.07	< 10 ⁻⁷	< 10 ⁻⁷	-0.04	< 10 ⁻⁷	< 10 ⁻⁷
85	Glycosphingolipid Metabolism	8	-0.07	< 10 ⁻⁷	< 10 ⁻⁷	-0.01	0.17	0.23
313	CDC6 association with the ORC origin complex	7	-0.08	3.3 x 10 ⁻⁴	1.0 x 10 ⁻³	0.02	0.27	0.34
221	Apoptotic cleavage of cell adhesion proteins	6	-0.08	6.0 x 10 ⁻⁶	2.8 x 10 ⁻⁵	0.01	0.40	0.49
257	Cytosolic tRNA Aminoacylation	5	-0.09	< 10 ⁻⁷	< 10 ⁻⁷	-0.03	< 10 ⁻⁷	1.9 x 10 ⁻⁷
661	Metabolism of Porphyrins	4	-0.10	< 10 ⁻⁷	< 10 ⁻⁷	-0.04	6.7 x 10 ⁻⁵	2.1 x 10 ⁻⁴
300	Hormone ligand binding receptors	3	-0.10	1.5 x 10 ⁻⁶	7.8 x 10 ⁻⁶	-0.01	0.33	0.41
558	Ethanol oxidation	2	-0.13	< 10 ⁻⁷	< 10 ⁻⁷	-0.01	0.46	0.55
485	Amino acid synthesis and interconversion transamination	1	-0.17	< 10 ⁻⁷	< 10 ⁻⁷	-0.02	0.07	0.11

Results of Quantitative Set Analysis of Gene Expression (Qusage version 2.2.2) analysis comparing gene expression values of genes assigned to the specified Reactome Pathways in *TRIB1*^{High} versus *TRIB1*^{Low} samples in CTS dataset.

Ranking of Reactome pathways (version 4.0) according to MDM transcriptome.

Increased (above dotted line) and reduced average RNA levels of gene set assigned to specified REACTOME Pathway.

Pathways highlighted in **Green** are significantly altered in both cell types; lipid-metabolism associated pathways (only altered in macrophages are highlighted in **Red**).

357 (MDM) and **332** (monocytes) ranked pathways were returned with P values < 0.05.

STable. 4. SYBR qPCR and mouse genotyping primer sequences

Gene	Forward primer (5'→3')	Reverse primer (5'→3')
<i>Abca1</i>	GGCCAGTCTGTGTAACGGAT	TGCATCGAGCTTCTTCCTCG
<i>Abcg1</i>	AGGTCTCAGCCTTCTAAAGTTCCTC	TCTCTCGAAGTGAATGAAATTTATCG
<i>Abdh5</i>	GTGTCCCCTGCACTTACAAGA	GGAGGACAAGTGCCGTCTTA
<i>Acat1</i>	ATTTGCTGACGCTGCTGTAGA	AAGGCTTCATTTACTTCCCACATTG
<i>β-actin</i>	GGGACCTGACAGACTACCTCATG	GTCACGCACGATTTCCCTCTCAGC
<i>Cd163</i>	CAGCGTAGTCTGCTCACGAT	AGTTGCTCCTGGCTGGTATG
<i>Cd68</i>	AAGGGGGCTCTTGGGAATA	CGAAGGGATCGTCATAGCCC
<i>Cd36</i>	ATGGGCTGTGATCGGAACTG	GTCTTCCAATAAGCATGTCTCC
<i>Ces1</i>	AGGGAGTTCTCGACGCAATG	ATGTAGGTGGGAGCTCCAGT
<i>Cxcl16</i>	GAGCGCAAAGAGTGTGGAAC	TGTGGACAAGGACCTGAAAAGT
<i>Hadhb</i>	ACCTGCGTTCATCAAACCCT	CAGAAGCGCCATCAGTCAGG
<i>Lpl</i>	TTGCAGAGAGAGGACTCGGA	GTTGCACCTGTATGCCTTGC
<i>Lxra</i>	TCAGCATCTTCTCTGCAGACCGG	TCATTAGCATCCGTGGGAACA
<i>Marco</i>	GACAAGCCCTTCTTCTCGCT	CCAAGCCCTCTTTAAGCCCC
<i>Msr1</i>	CGCACGTGGAACAGGAAGTA	TCTGTGAGTGTCCCAGTCC
<i>Nceh1</i>	AGAAGACCCTGCCACAATGA	CTGTGACTACGGGACACGATT
<i>Olr1</i>	AGATAGACACCCTCACCTTGAA	GTCACGCACGATTTCCCTCTCAGC
<i>Pltp</i>	CCATGTTGCCCCAAGTGGAG	CCCCGGAGTGTCAACTTAGC
<i>Pparγ</i>	GCCCTGGCAAAGCATTGTGA	TTTCTGTCAAGATCGCCCT
<i>Ptgs1</i>	GTTCCGAGCCCAGTTCCAATA	AGCTGTACTCTTGTGAGCCC
<i>Scarb1</i>	GATGGAGAGCAAGCCTGTGA	GACTATGTGCAGGGGTGCTC
<i>Stab1</i>	ACGCTGACTGCCTCAATACC	AAGCATCAGTGTGGCAAGT
<i>Lyz2Cre</i>	Common: CTTGGGCTGCCAGAATTTCTC	Mutant: CCCAGAAATGCCAGATTACG Wild type: TTACAGTCGGCCAGGCTGAC
<i>Rosa26.Trib1</i>	Common: GTGATCTGCAACTCCAGTCTTTC TAG	Mutant: CCTTCTTGACGAGTTCTTCTGAGG Wild type: CGCGACACTGTAATTTCATACTGTAG
<i>Trib1 fl/fl</i>	Common: ACCTTGATCTGCAGTCCTAGG	Floxed: AAGTTCACATTGAACTGATGGC Wild type: AGCTGGTTTCAGGGGAAGAC

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STable. 5. Linoleic (LiA), Oleic (OA) and Lauric Acid (LA) in vitro Polarised Human Monocyte Derived Macrophages^A Recapitulate the *Olr1*^{High}/*Lpl*^{High}/*Scarb1*^{Low}/*CD36*^{WT} RNA Profile of *Trib1*^{mTG} BMDM.

Stimulus	<i>OLR1</i>		<i>LPL</i>		<i>SCARB1</i>	
	Fold Change	p	Fold Change	p	Fold Change	p
LiA	6.36	6.60E-09	2.86	2.65E-05	-1.99	7.68E-07
SA	6.17	1.08E-08	3.19	4.00E-06	-1.85	8.55E-06
OA	5.50	5.70E-12	2.65	3.87E-07	-1.38	1.66E-03
LA	5.20	1.73E-07	4.44	6.37E-09	-1.33	3.32E-02
PA	4.76	1.78E-10	5.62	7.26E-17	-1.75	1.31E-07
<i>TNF_PGE2</i>	4.42	3.88E-04	-2.10	2.58E-02	-1.52	2.33E-02
TNF_P3C	3.86	1.21E-03	-1.38	3.30E-01	-1.24	2.34E-01
upLPS	3.42	3.40E-06	1.82	4.15E-03	-1.12	3.14E-01
<i>TPP</i>	2.66	9.76E-05	-2.80	5.33E-07	-1.38	3.53E-03
<i>TPP_IFNb</i>	2.37	3.68E-02	-3.28	4.31E-04	-1.62	8.93E-03
<i>TNF</i>	2.30	6.50E-03	1.86	1.12E-02	-1.68	1.61E-04
<i>sLPS</i>	1.86	2.10E-02	-1.36	1.60E-01	-1.27	4.43E-02
sLPS_IFNg	1.80	1.54E-01	-2.00	3.71E-02	-1.62	8.86E-03
IFNg	1.73	5.39E-02	1.33	2.10E-01	-1.51	1.17E-03
IFNg_TNF	1.49	3.30E-01	2.14	2.20E-02	-1.92	4.33E-04
sLPS_IC	1.46	3.57E-01	-1.49	2.27E-01	-1.38	8.14E-02
HDL	1.33	4.31E-01	-1.17	5.81E-01	-1.02	8.94E-01
IFNb	1.25	5.91E-01	1.45	2.58E-01	-1.07	7.25E-01
TPP_IFNb_IFNg	-1.01	9.81E-01	-3.52	1.95E-04	-1.91	4.74E-04
IL10	-1.04	9.31E-01	2.74	2.59E-03	1.09	6.24E-01
P3C_PGE2	-1.18	6.90E-01	-1.84	6.58E-02	-1.33	1.14E-01
P3C	-1.33	4.93E-01	-1.03	9.23E-01	1.00	9.91E-01
PGE2	-1.37	4.46E-01	-1.59	1.63E-01	1.08	6.75E-01
upLPS_IC	-1.44	3.76E-01	1.03	9.24E-01	1.23	2.53E-01
IL13	-1.97	9.89E-02	3.52	1.92E-04	-1.37	8.55E-02
GC	-2.28	4.59E-02	-3.33	3.62E-04	1.38	8.13E-02
IL4_upLPS	-2.37	4.74E-03	1.61	5.12E-02	1.36	2.14E-02
IL4	-3.04	1.49E-06	2.05	9.04E-05	1.03	7.69E-01
TRiB1 high MDM	1.86	4.76E-16	1.43	6.32E-11	-1.18	2.00E-08

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^AData extracted from [Xue et al.](#)

Italics indicate the eleven conditions that produce reciprocal changes in OLR1 and SCARB1 RNA.

Bold indicates the three conditions that recapitulate the *Olr1*^{High}/*Scarb1*^{Low}/*Lpl*^{High} profile of *Trib1*^{mTg} BMDMs.