

	TB Patients	LTBI controls	p value
Age (median years, IQR)	33 (25-40)	33 (24-41)	0.89
Sex (% female)	24	24	>0.99
Ethnicity (% Cape Mixed ancestry)	72	76	>0.99
Household TB contacts (%yes)	56	40	0.26
BMI (media, IQR)	20 (19-21)	26 (24-28)	<0.0001
Smoking (n)	Smoker	14	0.07
	Ex-smoker	7	
	Non-smoker	4	
Visit 1 (n° donors)	24	24	NA
Visit 2 (n° donors)	18 (after treatment)	19	NA

Table 1. Tuberculosis cohort characteristics. TB: tuberculosis; LTBI: Latent tuberculosis infection; IQR: Interquartile range; NA: Non applicable.

Plus genes
ACTA2
ALDH1A1
ANKRD22
APOL1
APOL6
BATF2
KLF2
CALML4
CASP4
CREB5
CYB561
DEFA1
DUSP3
ETV7
GAS6
GBP2
GBP4
GBP6
HPSE
KCNJ15
KREMEN1
LACTB
LHFPL2
LOC389386
FER1L3
SCARF1
SEPT4
SMARCD3
TRAFD1
VAMP5

Supplementary Table 1. Tuberculosis-related genes added to the Nanostring human immunology v2 panel.

Null (20)	BCG (28)	IL1b (15)	TB Ag (71)	
BAX	ADA	C1S	ACTA2	IL27
CD46	ALDH1A1	CR1	ALAS1	IL7
CD86	BATF	CYB561	ANKRD22	IRF1
CLEC7A	C7	DEFB103B	APOL1	IRF8
CMKLR1	C8A	DEFB4A	APOL6	JAK2
CXCL1	CCL22	GZMA	BATF2	KCNJ2
HAVCR2	CD22	HLA.DOB	CALML4	KLRG1
IFNAR2	CD36	ICAM2	CCL24	LHFPL2
IL10RA	CD99	KLRK1	CD274	LILRB4
IL12RB1	CLU	NCR1	CD276	LOC389386
IL1RL2	CSF2	NFKB1	CD44	LTB4R2
KIT	CTNNB1	NOD1	CD45R0	MUC1
LILRA2	CTSG	NT5E	CD74	PDCD1LG2
MME	IL10	TNFRSF10C	CD83	PECAM1
PTGS2	IL22	TNFSF12	CISH	PML
RPL19	IL22RA2		CLEC4A	PRDM1
S100A8	IL6		CSF2RB	PSMB10
STAT4	IRF4		CXCL2	PTAFR
STAT6	JAK1		ETV7	PTPN22
TYK2	LAIR1		FAS	PTPRC
	NCF4		FCGR1A.B	SMAD3
	PRF1		FER1L3	SOCS1
	PSMB5		FN1	SOCS3
	PSMB7		FYN	STAT1
	PSMC2		GBP1	STAT2
	PSMD7		GBP4	STAT5A
	TRAF2		GFI1	TAP2
	sCTLA4		GPR183	TGFBI
			HLA.C	TGFBR2
			HLA.DMA	TLR8
			HLA.DPB1	TNFAIP6
			HLA.DRA	TNFSF10
			IFI16	TNFSF13B
			IFITM1	TRAFD1
			IFNB1	VAMP5
			IL21	

Supplementary Table 2. List of differentially expressed genes between LTBI and TB -only after specific stimulation (t-test with a cut-off value of $q < 0.001$).

	TB Ag	BCG	
Different	62	40	
No different	560	582	q=0.03 (*)

	TB Ag	IL-1b	
Different	62	16	
No different	560	606	q=0.0001 (****)

	BCG	IL-1b	
Different	40	16	
No different	582	606	q=0.002 (**)

Supplementary Table 3. Contingency test (Fischer's exact test) for the differentially expressed genes upon immune stimulation (BCG, IL-1 β and TB Ag).

q-value				
Transcript	Null	BCG	IL-1b	TB Ag
CLL7	0.0001	0.6145	0.4439	0.1676
CCL5	0.8021	0.0006	0.6393	0.922
NFKB1	0.001	0.1019	2.95 x 10 ⁻⁴	0.0026
IDO1	0.0724	0.9277	0.443	2.24 x 10 ⁻⁵

Supplementary Table 4. Examples of stimuli-specific induced differences between LTBI and TB with q-value specified for each condition.

BIOCHEMICAL	Pathway	TB	LTBI
5alpha-pregnan-3beta,20alpha-diol monosulfate (2)	Steroid	0.55	-0.06
5alpha-pregnan-3beta,20beta-diol monosulfate (1)	Steroid	0.55	-0.05
5alpha-pregnan-3beta,20alpha-diol disulfate	Steroid	0.55	-0.08
pregnenediol-3-glucuronide	Steroid	0.51	-0.04
sphingomyelin (d18:1/20:2, d18:2/20:1, d16:1/22:2)*	Sphingolipid Metabolism	0.43	-0.09
5alpha-pregnan-3(alpha or beta),20beta-diol disulfate	Steroid	0.40	0.11
4-ethylphenylsulfate	Benzoate Metabolism	0.39	-0.02
stearoyl sphingomyelin (d18:1/18:0)	Sphingolipid Metabolism	0.37	0.26
1-palmitoleoylglycerol (16:1)*	Monoacylglycerol	0.36	-0.21
pyrraline	Food Component/Plant	0.36	-0.02
tryptophan betaine	Tryptophan Metabolism	0.35	-0.33
sphingomyelin (d18:1/22:2, d18:2/22:1, d16:1/24:2)*	Sphingolipid Metabolism Fatty Acid Metabolism(Acyl Carnitine)	0.34	-0.09
3-hydroxybutyrylcarnitine (2)	Carnitine)	0.33	0.20
1-eicosapentaenoylglycerol (20:5)*	Monoacylglycerol	0.32	0.05
laurate (12:0)	Medium Chain Fatty Acid	0.32	0.12
N-delta-acetylorithine	Urea cycle; Arginine and Proline Metabolism	0.31	-0.06
cystine	Methionine, Cysteine, SAM and Taurine Metabolism	0.30	-0.10
indole-3-carboxylic acid	Tryptophan Metabolism	0.29	0.14
sphingomyelin (d18:1/18:1, d18:2/18:0)	Sphingolipid Metabolism	0.29	0.25
linoleoyl-docosahexaenoyl-glycerol (18:2/22:6) [1]*	Diacylglycerol	0.28	0.21
1-linolenoylglycerol (18:3)	Monoacylglycerol	0.28	-0.07
1-arachidonoylglycerol (20:4)	Monoacylglycerol	0.27	-0.35
1-docosahexaenoylglycerol (22:6)	Monoacylglycerol	0.27	-0.11
betonicine	Food Component/Plant	0.26	-0.08
sphingomyelin (d18:0/18:0, d19:0/17:0)*	Sphingolipid Metabolism Urea cycle; Arginine and Proline Metabolism	0.26	0.48
N-methylproline	Metabolism	0.24	-0.07
4-methylcatechol sulfate	Benzoate Metabolism	0.24	0.03
isobutyrylcarnitine (C4)	Leucine, Isoleucine and Valine Metabolism	0.24	0.16
1-arachidonoyl-GPA (20:4)	Lysolipid	0.22	-0.27
p-cresol sulfate	Phenylalanine and Tyrosine Metabolism	0.21	-0.32
gamma-glutamylglutamate	Gamma-glutamyl Amino Acid	0.20	-0.30
2-arachidonoylglycerol (20:4)	Monoacylglycerol	0.19	-0.20
1-palmitoyl-GPA (16:0)	Lysolipid	0.18	-0.27

oleoyl-arachidonoyl-glycerol (18:1/20:4) [1]*	Diacylglycerol	0.18	0.30
stachydrine	Food Component/Plant	0.17	-0.06
1-palmitoyl-2-oleoyl-GPI (16:0/18:1)*	Phospholipid Metabolism	0.17	0.05
2-palmitoleoyl-GPC (16:1)*	Lysolipid	0.17	-0.02
tetradecanedioate	Fatty Acid, Dicarboxylate	0.17	0.33
oleoyl-arachidonoyl-glycerol (18:1/20:4) [2]*	Diacylglycerol	0.17	0.39
1-palmitoyl-GPG (16:0)*	Lysolipid	0.16	0.15
linoleoyl-arachidonoyl-glycerol (18:2/20:4) [1]*	Diacylglycerol	0.16	0.01
methyl glucopyranoside (alpha + beta)	Food Component/Plant	0.16	0.21
linoleoyl-docosahexaenoyl-glycerol (18:2/22:6) [2]*	Diacylglycerol	0.16	0.23
gluconate	Food Component/Plant	0.16	0.11
1-palmitoyl-2-linoleoyl-GPI (16:0/18:2)	Phospholipid Metabolism	0.16	0.18
glycocholate sulfate*	Secondary Bile Acid Metabolism	0.16	0.20
sphingomyelin (d18:2/23:1)*	Sphingolipid Metabolism	0.16	0.24
undecanoate (11:0)	Medium Chain Fatty Acid	0.15	-0.01
sphingomyelin (d18:2/24:2)*	Sphingolipid Metabolism	0.15	-0.20
indolepropionate	Tryptophan Metabolism	0.15	-0.04
2-palmitoyl-GPC (16:0)*	Lysolipid	0.15	-0.21
palmitoleoyl-linoleoyl-glycerol (16:1/18:2) [1]*	Diacylglycerol	0.14	0.18
sphingomyelin (d18:1/17:0, d17:1/18:0, d19:1/16:0)	Sphingolipid Metabolism	0.14	0.38
benzoate	Benzoate Metabolism	0.14	0.21
sphingomyelin (d18:2/18:1)*	Sphingolipid Metabolism	0.14	0.21
1-myristoylglycerol (14:0)	Monoacylglycerol	0.13	-0.13
3-phenylpropionate (hydrocinnamate)	Phenylalanine and Tyrosine Metabolism	0.13	-0.15
sebacate (decanedioate)	Fatty Acid, Dicarboxylate	0.12	0.43
isovalerylcarnitine (C5)	Leucine, Isoleucine and Valine Metabolism	0.12	-0.22
choline	Phospholipid Metabolism	0.12	0.31
1-palmitoyl-GPC (16:0)	Lysolipid	0.11	0.17
gamma-glutamylglutamine	Gamma-glutamyl Amino Acid	0.11	-0.18
1-oleoyl-GPA (18:1)	Lysolipid	0.11	-0.24
4-allylphenol sulfate	Food Component/Plant	0.11	-0.26
1-palmitoleoyl-GPC (16:1)*	Lysolipid	0.10	0.03
gamma-glutamylalanine	Gamma-glutamyl Amino Acid	0.10	-0.31
undecanedioate	Fatty Acid, Dicarboxylate	0.10	0.10
docosapentaenoate (n3 DPA; 22:5n3)	Polyunsaturated Fatty Acid (n3 and n6)	0.10	0.07
2-oxoarginine*	Urea cycle; Arginine and Proline Metabolism	0.10	-0.16
isocitrate	TCA Cycle	0.10	0.05
1-arachidonoyl-GPC (20:4n6)*	Lysolipid	0.10	-0.19

pentadecanoate (15:0)	Long Chain Fatty Acid	0.10	0.19
3-hydroxyhexanoate	Fatty Acid, Monohydroxy	0.10	0.44
palmitoyl-linolenoyl-glycerol (16:0/18:3) [2]*	Diacylglycerol	0.10	0.32
1-palmitoylglycerol (16:0)	Monoacylglycerol	0.10	-0.32
gentisate	Phenylalanine and Tyrosine Metabolism	0.09	0.11
diacylglycerol (16:1/18:2 [2], 16:0/18:3 [1])*	Diacylglycerol	0.09	0.33
myristoyl dihydrosphingomyelin (d18:0/14:0)*	Sphingolipid Metabolism	0.09	0.23
diacylglycerol (12:0/18:1, 14:0/16:1, 16:0/14:1) [2]*	Diacylglycerol	0.09	0.32
1-palmitoyl-GPI (16:0)	Lysolipid	0.08	-0.10
kynurenine	Tryptophan Metabolism	0.08	-0.24
palmitoyl sphingomyelin (d18:1/16:0)	Sphingolipid Metabolism	0.08	0.30
3-hydroxy-2-ethylpropionate	Leucine, Isoleucine and Valine Metabolism	0.08	-0.25
1-palmitoyl-2-palmitoleoyl-GPC (16:0/16:1)*	Phospholipid Metabolism	0.08	0.25
4-hydroxyhippurate	Benzoate Metabolism	0.07	0.16
1-palmitoyl-2-arachidonoyl-GPE (16:0/20:4)*	Phospholipid Metabolism	0.07	0.39
linoleoyl-arachidonoyl-glycerol (18:2/20:4) [2]*	Diacylglycerol	0.07	-0.05
alpha-hydroxyisovalerate	Leucine, Isoleucine and Valine Metabolism	0.07	-0.05
palmitoyl-myristoyl-glycerol (16:0/14:0) [2]	Diacylglycerol	0.06	0.37
linoleoyl-linolenoyl-glycerol (18:2/18:3) [2]*	Diacylglycerol	0.06	0.06
myristoylcarnitine (C14)	Fatty Acid Metabolism(Acyl Carnitine)	0.06	0.17
isoursodeoxycholate	Secondary Bile Acid Metabolism	0.05	-0.02
3-carboxy-4-methyl-5-propyl-2-furanpropanoate (CMPF)	Fatty Acid, Dicarboxylate	0.05	-0.24
2-stearoyl-GPE (18:0)*	Lysolipid	0.05	0.37
palmitoyl-arachidonoyl-glycerol (16:0/20:4) [2]*	Diacylglycerol	0.05	0.47
myristoleoylcarnitine (C14:1)*	Fatty Acid Metabolism(Acyl Carnitine)	0.05	0.17
linoleoyl-linolenoyl-glycerol (18:2/18:3) [1]*	Diacylglycerol	0.05	-0.03
sphingomyelin (d18:1/20:1, d18:2/20:0)*	Sphingolipid Metabolism	0.04	-0.04
1-oleoylglycerol (18:1)	Monoacylglycerol	0.04	-0.19
sphingomyelin (d17:1/16:0, d18:1/15:0, d16:1/17:0)*	Sphingolipid Metabolism	0.04	0.33
palmitoleoylcarnitine (C16:1)*	Fatty Acid Metabolism(Acyl Carnitine)	0.04	0.04
sphingomyelin (d18:1/14:0, d16:1/16:0)*	Sphingolipid Metabolism	0.04	0.20
succinylcarnitine (C4-DC)	TCA Cycle	0.04	0.31
glycosyl-N-stearoyl-sphingosine (d18:1/18:0)	Sphingolipid Metabolism	0.03	0.07

methionine sulfoxide	Methionine, Cysteine, SAM and Taurine Metabolism	0.03	-0.19
erythritol	Food Component/Plant	0.03	0.07
1-palmitoyl-GPE (16:0)	Lysolipid	0.03	0.62
diacylglycerol (14:0/18:1, 16:0/16:1) [2]*	Diacylglycerol	0.03	0.44
1-stearoyl-2-oleoyl-GPI (18:0/18:1)*	Phospholipid Metabolism	0.03	-0.09
docosahexaenoate (DHA; 22:6n3)	Polyunsaturated Fatty Acid (n3 and n6)	0.02	0.12
behenoyl dihydrosphingomyelin (d18:0/22:0)*	Sphingolipid Metabolism	0.02	0.37
sphingomyelin (d18:2/16:0, d18:1/16:1)*	Sphingolipid Metabolism	0.02	0.17
citrulline	Urea cycle; Arginine and Proline Metabolism	0.02	-0.03
diacylglycerol (14:0/18:1, 16:0/16:1) [1]*	Diacylglycerol	0.02	0.43
sphingomyelin (d18:2/21:0, d16:2/23:0)*	Sphingolipid Metabolism	0.02	0.29
sphingomyelin (d18:1/19:0, d19:1/18:0)*	Sphingolipid Metabolism	0.02	0.42
1-linoleoylglycerol (18:2)	Monoacylglycerol	0.02	-0.47
1-palmitoyl-2-oleoyl-GPC (16:0/18:1)	Phospholipid Metabolism	0.02	0.24
dihomo-linoleate (20:2n6)	Polyunsaturated Fatty Acid (n3 and n6)	0.02	-0.03
pelargonate (9:0)	Medium Chain Fatty Acid	0.01	-0.06
piperine	Food Component/Plant	0.01	0.10
2-methylbutyrylcarnitine (C5)	Leucine, Isoleucine and Valine Metabolism	0.01	0.09
saccharin	Food Component/Plant	0.01	-0.21
p-cresol-glucuronide*	Phenylalanine and Tyrosine Metabolism	0.01	0.15
betaine	Glycine, Serine and Threonine Metabolism	0.01	-0.19
1-palmitoleoyl-2-linoleoyl-GPC (16:1/18:2)*	Phospholipid Metabolism	0.01	-0.02
3-indoxyl sulfate	Tryptophan Metabolism	0.00	-0.18
oleoyl-oleoyl-glycerol (18:1/18:1) [2]*	Diacylglycerol	0.00	0.50
glycolithocholate sulfate*	Secondary Bile Acid Metabolism	0.00	-0.01
glycoursodeoxycholate	Secondary Bile Acid Metabolism	0.00	0.05
3-methoxytyrosine	Phenylalanine and Tyrosine Metabolism	0.00	-0.08
1-linoleoyl-GPA (18:2)*	Lysolipid	0.00	-0.31
2-palmitoylglycerol (16:0)	Monoacylglycerol	0.00	-0.21
1-stearoyl-GPE (18:0)	Lysolipid	0.00	0.61
linoleate (18:2n6)	Polyunsaturated Fatty Acid (n3 and n6)	0.00	0.03
proline	Urea cycle; Arginine and Proline Metabolism	0.00	-0.01
1-palmitoyl-2-linoleoyl-GPE (16:0/18:2)	Phospholipid Metabolism	0.00	0.55
picolinate	Tryptophan Metabolism	0.00	0.28
N-acetylvaline	Leucine, Isoleucine and Valine Metabolism	-0.61	0.16

N-acetylleucine	Leucine, Isoleucine and Valine Metabolism	-0.54	-0.04
N-acetylglutamine	Glutamate Metabolism	-0.52	-0.30
gamma-glutamylthreonine	Gamma-glutamyl Amino Acid Phenylalanine and Tyrosine Metabolism	-0.45	-0.15
3-(4-hydroxyphenyl)lactate	Metabolism	-0.45	-0.22
2-hydroxyoctanoate	Fatty Acid, Monohydroxy	-0.44	-0.16
indolelactate	Tryptophan Metabolism	-0.42	-0.20
gamma-glutamylleucine	Gamma-glutamyl Amino Acid	-0.42	-0.13
gamma-glutamyltyrosine	Gamma-glutamyl Amino Acid	-0.42	-0.20
2-keto-3-deoxy-gluconate	Food Component/Plant Leucine, Isoleucine and Valine Metabolism	-0.41	0.07
N-acetylisoleucine	Metabolism	-0.41	-0.17
gamma-glutamyl-epsilon-lysine	Gamma-glutamyl Amino Acid	-0.40	-0.02
gamma-glutamylvaline	Gamma-glutamyl Amino Acid	-0.39	0.13
13-HODE + 9-HODE	Fatty Acid, Monohydroxy	-0.39	0.08
1-oleoyl-GPS (18:1)	Lysolipid	-0.39	-0.04
cysteine	Methionine, Cysteine, SAM and Taurine Metabolism	-0.38	-0.03
imidazole lactate	Histidine Metabolism	-0.38	-0.09
alliin	Food Component/Plant Leucine, Isoleucine and Valine Metabolism	-0.38	-0.09
valine	Metabolism	-0.37	0.13
tryptophan	Tryptophan Metabolism	-0.36	-0.15
N-acetylarginine	Urea cycle; Arginine and Proline Metabolism	-0.36	0.07
thymol sulfate	Food Component/Plant	-0.36	0.26
5-acetylamino-6-formylamino-3-methyluracil	Xanthine Metabolism	-0.36	-0.19
trans-urocanate	Histidine Metabolism	-0.35	-0.07
pyroglutamine*	Glutamate Metabolism	-0.35	-0.23
3-methylxanthine	Xanthine Metabolism	-0.35	0.22
trans-4-hydroxyproline	Urea cycle; Arginine and Proline Metabolism	-0.35	0.24
N-acetylglutamate	Glutamate Metabolism	-0.35	0.45
N-acetylphenylalanine	Phenylalanine and Tyrosine Metabolism	-0.34	-0.44
glycerophosphorylcholine (GPC)	Phospholipid Metabolism	-0.34	0.18
glycerophosphoethanolamine	Phospholipid Metabolism	-0.34	0.27
N-formylmethionine	Methionine, Cysteine, SAM and Taurine Metabolism	-0.34	0.17
gamma-glutamylisoleucine*	Gamma-glutamyl Amino Acid	-0.34	0.00
N-acetylhistidine	Histidine Metabolism	-0.33	-0.05
theobromine	Xanthine Metabolism	-0.33	-0.08
kynurenate	Tryptophan Metabolism	-0.32	-0.19
glutamate	Glutamate Metabolism	-0.32	-0.03
threonine	Glycine, Serine and Threonine Metabolism	-0.32	-0.13

5alpha-androstan-3beta,17beta-diol monosulfate (2)	Steroid	-0.32	-0.33
1-linoleoyl-GPG (18:2)*	Lysolipid	-0.32	-0.24
glutamine	Glutamate Metabolism	-0.31	-0.02
1,7-dimethylurate	Xanthine Metabolism	-0.31	0.04
choline phosphate	Phospholipid Metabolism	-0.31	0.04
malate	TCA Cycle	-0.31	0.10
2-hydroxyglutarate	Fatty Acid, Dicarboxylate	-0.31	0.13
cortisol	Steroid	-0.31	0.38
paraxanthine	Xanthine Metabolism	-0.30	0.06
homoarginine	Urea cycle; Arginine and Proline Metabolism	-0.30	-0.20
5alpha-androstan-3alpha,17beta-diol monosulfate (1)	Steroid	-0.30	-0.27
N-acetylserine	Glycine, Serine and Threonine Metabolism	-0.30	0.32
N-acetyltyrosine	Phenylalanine and Tyrosine Metabolism	-0.30	-0.17
gamma-glutamyl-alpha-lysine	Gamma-glutamyl Amino Acid	-0.30	-0.02
dimethylarginine (SDMA + ADMA)	Urea cycle; Arginine and Proline Metabolism	-0.29	0.15
1,3,7-trimethylurate	Xanthine Metabolism	-0.29	-0.15
1-linoleoyl-GPE (18:2)*	Lysolipid	-0.29	-0.06
1,2-dilinoeloyl-GPC (18:2/18:2)	Phospholipid Metabolism	-0.29	-0.16
1-methylhistidine	Histidine Metabolism	-0.29	0.04
1-stearoyl-2-linoleoyl-GPC (18:0/18:2)*	Phospholipid Metabolism	-0.29	0.03
N-behenoyl-sphingadienine (d18:2/22:0)*	Sphingolipid Metabolism	-0.29	0.18
1-methylxanthine	Xanthine Metabolism	-0.29	0.19
S-adenosylhomocysteine (SAH)	Methionine, Cysteine, SAM and Taurine Metabolism	-0.29	-0.02
2-methylcitrate/homocitrate	TCA Cycle	-0.28	-0.10
alpha-hydroxyisocaproate	Leucine, Isoleucine and Valine Metabolism	-0.28	0.03
lactosyl-N-nervonoyl-sphingosine (d18:1/24:1)*	Sphingolipid Metabolism	-0.28	-0.17
urea	Urea cycle; Arginine and Proline Metabolism	-0.28	0.40
gamma-glutamylhistidine	Gamma-glutamyl Amino Acid	-0.28	-0.21
3-hydroxyhippurate	Benzoate Metabolism	-0.27	-0.09
3-methyl-2-oxovalerate	Leucine, Isoleucine and Valine Metabolism	-0.27	0.14
adipate	Fatty Acid, Dicarboxylate	-0.27	0.10
propyl 4-hydroxybenzoate sulfate	Benzoate Metabolism	-0.27	0.03
glycosyl-N-palmitoyl-sphingosine (d18:1/16:0)	Sphingolipid Metabolism	-0.27	0.33
citrate	TCA Cycle	-0.27	-0.23
lignoceroyl sphingomyelin (d18:1/24:0)	Sphingolipid Metabolism	-0.26	0.06
androstenediol (3alpha, 17alpha) monosulfate (2)	Steroid	-0.26	-0.20
behenoyl sphingomyelin (d18:1/22:0)*	Sphingolipid Metabolism	-0.26	0.28

4-hydroxyphenylpyruvate	Phenylalanine and Tyrosine Metabolism	-0.26	0.39
succinate	TCA Cycle	-0.26	0.28
1-arachidonoyl-GPE (20:4n6)*	Lysolipid	-0.26	0.08
S-methylcysteine	Methionine, Cysteine, SAM and Taurine Metabolism	-0.26	-0.35
N-acetyl-1-methylhistidine*	Histidine Metabolism	-0.26	0.12
octadecanedioate	Fatty Acid, Dicarboxylate	-0.25	0.42
fumarate	TCA Cycle	-0.25	0.08
2-hydroxydecanoate	Fatty Acid, Monohydroxy Glycine, Serine and Threonine Metabolism	-0.25	-0.11
sarcosine	Phenylalanine and Tyrosine Metabolism	-0.25	0.01
5-bromotryptophan	Methionine, Cysteine, SAM and Taurine Metabolism	-0.25	-0.34
hypotaurine	Lysolipid	-0.25	0.04
1-arachidonoyl-GPI (20:4)*	Lysolipid	-0.25	-0.11
androstenediol (3beta,17beta) disulfate (2)	Steroid	-0.25	-0.20
taurine	Methionine, Cysteine, SAM and Taurine Metabolism	-0.24	-0.07
phenylalanine	Phenylalanine and Tyrosine Metabolism	-0.24	0.01
3-methyl-2-oxobutyrate	Leucine, Isoleucine and Valine Metabolism	-0.24	0.15
cerotoylcarnitine (C26)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.24	0.17
5alpha-androstan-3beta,17alpha-diol disulfate	Steroid	-0.24	-0.49
16-hydroxypalmitate	Fatty Acid, Monohydroxy Leucine, Isoleucine and Valine Metabolism	-0.24	0.34
leucine	Phenylalanine and Tyrosine Metabolism	-0.24	0.11
tyrosine	Phenylalanine and Tyrosine Metabolism	-0.23	0.09
8-hydroxyoctanoate	Fatty Acid, Monohydroxy	-0.23	0.20
1-linoleoyl-GPI (18:2)*	Lysolipid	-0.23	0.03
maleate	Fatty Acid, Dicarboxylate	-0.23	0.58
3-hydroxylaurate	Fatty Acid, Monohydroxy	-0.23	0.59
glycohyocholate	Secondary Bile Acid Metabolism	-0.23	0.11
trimethylamine N-oxide	Phospholipid Metabolism	-0.23	0.29
stearoylcarnitine (C18)	Fatty Acid Metabolism(Acyl Carnitine)	-0.23	0.19
gamma-glutamylphenylalanine	Gamma-glutamyl Amino Acid	-0.22	-0.18
azelate (nonanedioate)	Fatty Acid, Dicarboxylate	-0.22	-0.20
isovalerylglycine	Leucine, Isoleucine and Valine Metabolism	-0.22	-0.07
catechol sulfate	Benzoate Metabolism	-0.22	-0.07
theophylline	Xanthine Metabolism	-0.22	-0.03
5alpha-androstan-3alpha,17beta-diol disulfate	Steroid	-0.22	-0.01
nervonate (24:1n9)*	Long Chain Fatty Acid	-0.22	0.18

1-(1-enyl-palmitoyl)-2-arachidonoyl-GPC (P-16:0/20:4)*	Plasmalogen	-0.22	-0.10
eicosanodioate	Fatty Acid, Dicarboxylate	-0.22	-0.25
o-cresol sulfate	Phenylalanine and Tyrosine Metabolism	-0.21	0.06
C-glycosyltryptophan	Tryptophan Metabolism	-0.21	-0.19
behenate (22:0)*	Long Chain Fatty Acid	-0.21	-0.25
sphinganine-1-phosphate	Sphingolipid Metabolism	-0.21	-0.09
dihomo-linoleoylcarnitine (C20:2)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.21	0.00
S-methylcysteine sulfoxide	Methionine, Cysteine, SAM and Taurine Metabolism	-0.21	-0.09
etiocholanolone glucuronide	Steroid	-0.21	0.07
quinat	Food Component/Plant	-0.20	-0.11
N-acetylmethionine	Methionine, Cysteine, SAM and Taurine Metabolism	-0.20	0.01
indoleacetate	Tryptophan Metabolism	-0.20	-0.01
formiminoglutamate	Histidine Metabolism	-0.20	0.33
caffeine	Xanthine Metabolism	-0.20	-0.01
sphingomyelin (d18:2/14:0, d18:1/14:1)*	Sphingolipid Metabolism	-0.20	-0.07
docosadioate	Fatty Acid, Dicarboxylate	-0.20	-0.13
dimethylglycine	Glycine, Serine and Threonine Metabolism	-0.20	0.18
N-acetyltryptophan	Tryptophan Metabolism	-0.20	-0.19
7-methylurate	Xanthine Metabolism	-0.20	0.18
docosapentaenoate (n6 DPA; 22:5n6)	Polyunsaturated Fatty Acid (n3 and n6)	-0.20	0.04
hyocholate	Secondary Bile Acid Metabolism	-0.20	0.12
3-methyl catechol sulfate (1)	Benzoate Metabolism	-0.19	0.03
androstenediol (3beta,17beta) disulfate (1)	Steroid	-0.19	-0.28
1-stearoyl-2-linoleoyl-GPI (18:0/18:2)	Phospholipid Metabolism	-0.19	0.11
1-(1-enyl-palmitoyl)-2-linoleoyl-GPE (P-16:0/18:2)*	Plasmalogen	-0.19	0.33
O-methylcatechol sulfate	Benzoate Metabolism	-0.19	0.08
N-acetyltaurine	Methionine, Cysteine, SAM and Taurine Metabolism	-0.19	-0.36
androsterone sulfate	Steroid	-0.19	-0.36
argininosuccinate	Urea cycle; Arginine and Proline Metabolism	-0.19	0.43
pregnen-diol disulfate*	Steroid	-0.19	-0.22
1-oleoyl-GPE (18:1)	Lysolipid	-0.18	0.15
ximenoylcarnitine (C26:1)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.18	0.04
docosapentaenoylcarnitine (C22:5n3)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.18	0.00
myristoleate (14:1n5)	Long Chain Fatty Acid	-0.18	0.30
1-linoleoyl-2-linolenoyl-GPC (18:2/18:3)*	Phospholipid Metabolism	-0.18	0.07
androstenediol (3beta,17beta) monosulfate (2)	Steroid	-0.18	-0.38

1-(1-enyl-palmitoyl)-2-palmitoyl-GPC (P-16:0/16:0)*	Plasmalogen	-0.18	0.04
eugenol sulfate	Food Component/Plant	-0.18	0.39
1-linoleoyl-GPC (18:2)	Lysolipid	-0.18	-0.28
cysteine s-sulfate	Methionine, Cysteine, SAM and Taurine Metabolism	-0.18	-0.07
methyl-4-hydroxybenzoate sulfate	Benzoate Metabolism	-0.18	-0.09
N-alpha-acetylornithine tricosanoyl sphingomyelin (d18:1/23:0)*	Urea cycle; Arginine and Proline Metabolism	-0.18	-0.02
arachidoylcarnitine (C20)*	Sphingolipid Metabolism	-0.17	0.34
linoleoylcarnitine (C18:2)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.17	0.19
1-linoleoyl-2-arachidonoyl-GPC (18:2/20:4n6)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.17	-0.11
lignoceroylcarnitine (C24)*	Phospholipid Metabolism	-0.17	0.01
1,3-dimethylurate	Fatty Acid Metabolism(Acyl Carnitine)	-0.17	-0.04
palmitoyl-palmitoyl-glycerol (16:0/16:0) [1]*	Xanthine Metabolism	-0.17	-0.09
androstenediol (3beta,17beta) monosulfate (1)	Diacylglycerol	-0.17	0.45
pregn steroid monosulfate*	Steroid	-0.17	-0.14
5alpha-androstan-3beta,17beta-diol disulfate	Steroid	-0.17	-0.28
N-acetylthreonine	Steroid	-0.17	-0.34
1-methylimidazoleacetate	Glycine, Serine and Threonine Metabolism	-0.17	0.11
stearate (18:0)	Histidine Metabolism	-0.17	0.06
2-oleoylglycerol (18:1)	Long Chain Fatty Acid	-0.16	0.14
3-hydroxydecanoate	Monoacylglycerol	-0.16	-0.08
cortisone	Fatty Acid, Monohydroxy	-0.16	0.69
epiandrosterone sulfate	Steroid	-0.16	-0.22
1-palmitoyl-2-stearoyl-GPC (16:0/18:0) sphingomyelin (d18:1/24:1, d18:2/24:0)*	Steroid	-0.16	-0.36
caprylate (8:0)	Phospholipid Metabolism	-0.15	0.41
thyroxine	Sphingolipid Metabolism	-0.15	-0.09
5-acetylamino-6-amino-3-methyluracil	Medium Chain Fatty Acid	-0.15	-0.36
stearidonate (18:4n3)	Phenylalanine and Tyrosine Metabolism	-0.15	-0.17
dopamine 3-O-sulfate	Xanthine Metabolism	-0.15	0.02
methionine	Polyunsaturated Fatty Acid (n3 and n6)	-0.15	0.25
sphingomyelin (d18:1/22:1, d18:2/22:0, d16:1/24:1)*	Phenylalanine and Tyrosine Metabolism	-0.15	-0.27
erucate (22:1n9)	Methionine, Cysteine, SAM and Taurine Metabolism	-0.15	-0.24
N-(2-furoyl)glycine	Sphingolipid Metabolism	-0.15	0.06
beta-citrylglutamate	Long Chain Fatty Acid	-0.15	0.01
	Food Component/Plant	-0.15	-0.23
	Glutamate Metabolism	-0.15	0.05

1-stearoyl-2-arachidonoyl-GPE (18:0/20:4)	Phospholipid Metabolism	-0.15	0.35
4-methyl-2-oxopentanoate	Leucine, Isoleucine and Valine Metabolism	-0.15	0.19
N-formylphenylalanine	Phenylalanine and Tyrosine Metabolism	-0.15	-0.02
1-palmitoyl-2-linoleoyl-GPC (16:0/18:2)	Phospholipid Metabolism	-0.14	0.26
andro steroid monosulfate (1)*	Steroid	-0.14	-0.30
S-1-pyrroline-5-carboxylate	Glutamate Metabolism	-0.14	-0.07
5-dodecenoate (12:1n7)	Medium Chain Fatty Acid	-0.14	0.34
serine	Glycine, Serine and Threonine Metabolism	-0.14	-0.45
adrenoylcarnitine (C22:4)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.14	-0.07
sphingomyelin (d18:1/25:0, d19:0/24:1, d20:1/23:0, d19:1/24:0)*	Sphingolipid Metabolism	-0.14	0.19
1-oleoyl-GPI (18:1)*	Lysolipid	-0.14	-0.12
dihomo-linolenate (20:3n3 or n6)	Polyunsaturated Fatty Acid (n3 and n6)	-0.14	-0.19
2-hydroxy-3-methylvalerate	Leucine, Isoleucine and Valine Metabolism	-0.14	-0.02
ornithine	Urea cycle; Arginine and Proline Metabolism	-0.14	-0.14
imidazole propionate	Histidine Metabolism	-0.13	0.23
eicosenoylcarnitine (C20:1)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.13	0.11
1-stearoyl-GPI (18:0)	Lysolipid	-0.13	-0.20
docosadienoate (22:2n6)	Polyunsaturated Fatty Acid (n3 and n6)	-0.13	0.10
1-(1-enyl-stearoyl)-2-arachidonoyl-GPE (P-18:0/20:4)*	Plasmalogen	-0.13	0.44
acetylcarnitine (C2)	Fatty Acid Metabolism(Acyl Carnitine)	-0.13	0.45
arachidate (20:0)	Long Chain Fatty Acid	-0.13	-0.08
2-hydroxyhippurate (salicylurate)	Benzoate Metabolism	-0.13	0.29
glycine	Glycine, Serine and Threonine Metabolism	-0.13	-0.10
5-hydroxymethyl-2-furoic acid	Phenylalanine and Tyrosine Metabolism	-0.13	-0.18
2-hydroxystearate	Fatty Acid, Monohydroxy	-0.13	-0.03
gamma-glutamyltryptophan	Gamma-glutamyl Amino Acid	-0.13	-0.21
1-(1-enyl-palmitoyl)-2-linoleoyl-GPC (P-16:0/18:2)*	Plasmalogen	-0.12	-0.09
sphingosine 1-phosphate	Sphingolipid Metabolism	-0.12	-0.29
palmitoyl-oleoyl-glycerol (16:0/18:1) [1]*	Diacylglycerol	-0.12	0.63
1-(1-enyl-palmitoyl)-2-oleoyl-GPC (P-16:0/18:1)*	Plasmalogen	-0.12	-0.05
histidine	Histidine Metabolism	-0.12	0.00
sphingomyelin (d18:2/23:0, d18:1/23:1, d17:1/24:1)*	Sphingolipid Metabolism	-0.12	0.10
glycodeoxycholate	Secondary Bile Acid Metabolism	-0.12	0.25
phenol sulfate	Phenylalanine and Tyrosine Metabolism	-0.12	-0.37

hippurate	Benzoate Metabolism	-0.12	0.20
octanoylcarnitine (C8)	Fatty Acid Metabolism(Acyl Carnitine)	-0.12	0.44
cinnamoylglycine	Food Component/Plant Fatty Acid Metabolism(Acyl Carnitine)	-0.12	-0.10
margaroylcarnitine*	Fatty Acid Metabolism(Acyl Carnitine)	-0.12	0.25
1,2-dipalmitoyl-GPC (16:0/16:0)	Phospholipid Metabolism	-0.12	0.40
linolenate [alpha or gamma; (18:3n3 or 6)]	Polyunsaturated Fatty Acid (n3 and n6)	-0.11	0.09
3-hydroxystearate	Fatty Acid, Monohydroxy	-0.11	0.19
androstenediol (3alpha, 17alpha) monsulfate (3)	Steroid	-0.11	-0.32
alpha-ketoglutarate	TCA Cycle	-0.11	0.22
argininate*	Urea cycle; Arginine and Proline Metabolism	-0.11	0.36
eicosenoate (20:1)	Long Chain Fatty Acid	-0.11	0.11
1-stearoyl-2-arachidonoyl-GPC (18:0/20:4)	Phospholipid Metabolism	-0.11	-0.19
oleate/vaccenate (18:1)	Long Chain Fatty Acid	-0.11	0.22
phenyllactate (PLA)	Phenylalanine and Tyrosine Metabolism	-0.11	-0.07
myristate (14:0)	Long Chain Fatty Acid	-0.11	0.20
arachidonoylcarnitine (C20:4)	Fatty Acid Metabolism(Acyl Carnitine)	-0.11	-0.07
oleoylcarnitine (C18:1)	Fatty Acid Metabolism(Acyl Carnitine)	-0.11	-0.14
1-(1-enyl-palmitoyl)-2-arachidonoyl-GPE (P-16:0/20:4)*	Plasmalogen	-0.11	0.21
N-palmitoyl-sphinganine (d18:0/16:0)	Sphingolipid Metabolism	-0.11	0.45
sphingosine	Sphingolipid Metabolism	-0.11	-0.22
1-linolenoyl-GPC (18:3)*	Lysolipid	-0.10	-0.03
N-acetylglycine	Glycine, Serine and Threonine Metabolism	-0.10	0.01
hexadecanedioate	Fatty Acid, Dicarboxylate	-0.10	0.51
methylsuccinate	Leucine, Isoleucine and Valine Metabolism	-0.10	0.25
N-stearoyl-sphingosine (d18:1/18:0)*	Sphingolipid Metabolism	-0.10	0.62
pro-hydroxy-pro	Urea cycle; Arginine and Proline Metabolism	-0.10	0.19
taurodeoxycholate	Secondary Bile Acid Metabolism	-0.10	0.14
1-stearoyl-2-arachidonoyl-GPI (18:0/20:4)	Phospholipid Metabolism	-0.10	-0.20
1-palmitoyl-2-arachidonoyl-GPI (16:0/20:4)*	Phospholipid Metabolism	-0.10	0.00
palmitoyl-oleoyl-glycerol (16:0/18:1) [2]*	Diacylglycerol	-0.10	0.64
methionine sulfone	Methionine, Cysteine, SAM and Taurine Metabolism	-0.10	-0.06
phosphoethanolamine	Phospholipid Metabolism	-0.10	0.23
1-stearoyl-GPS (18:0)*	Lysolipid	-0.10	-0.14
1-dihomo-linolenylglycerol (20:3)	Monoacylglycerol	-0.09	-0.49
palmitoyl dihydrosphingomyelin (d18:0/16:0)*	Sphingolipid Metabolism	-0.09	0.31

2-ethylphenylsulfate	Benzoate Metabolism	-0.09	0.09
cis-aconitate	TCA Cycle	-0.09	-0.15
palmitoleate (16:1n7)	Long Chain Fatty Acid	-0.09	0.19
dihomo-linolenoylcarnitine (20:3n3 or 6)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.09	-0.11
decanoylcarnitine (C10)	Fatty Acid Metabolism(Acyl Carnitine)	-0.09	0.34
3-methoxycatechol sulfate (1)	Benzoate Metabolism	-0.09	0.21
ergothioneine	Food Component/Plant	-0.09	-0.12
heptanoate (7:0)	Medium Chain Fatty Acid	-0.09	0.27
N-palmitoyl-sphingosine (d18:1/16:0)	Sphingolipid Metabolism	-0.09	0.41
10-nonadecenoate (19:1n9)	Long Chain Fatty Acid	-0.09	0.24
taurocholate sulfate	Secondary Bile Acid Metabolism	-0.09	0.14
stearoyl-arachidonoyl-glycerol (18:0/20:4) [2]*	Diacylglycerol	-0.09	0.48
4-vinylphenol sulfate	Benzoate Metabolism	-0.08	-0.06
1-stearoyl-GPC (18:0)	Lysolipid	-0.08	0.06
1-stearoyl-2-oleoyl-GPC (18:0/18:1)	Phospholipid Metabolism	-0.08	0.26
glycodeoxycholate sulfate	Secondary Bile Acid Metabolism	-0.08	0.27
1-stearoyl-2-oleoyl-GPE (18:0/18:1)	Phospholipid Metabolism	-0.08	0.37
1-(1-enyl-palmitoyl)-2-oleoyl-GPE (P-16:0/18:1)*	Plasmalogen	-0.08	0.20
nonadecanoate (19:0)	Long Chain Fatty Acid	-0.08	0.00
gamma-glutamylmethionine	Gamma-glutamyl Amino Acid	-0.08	-0.26
oleoyl-oleoyl-glycerol (18:1/18:1) [1]*	Diacylglycerol	-0.08	0.44
arachidonate (20:4n6)	Polyunsaturated Fatty Acid (n3 and n6)	-0.08	-0.11
N-acetylproline	Urea cycle; Arginine and Proline Metabolism	-0.07	0.00
palmitoyl-palmitoyl-glycerol (16:0/16:0) [2]*	Diacylglycerol	-0.07	0.54
2-hydroxybutyrate/2-hydroxyisobutyrate	Methionine, Cysteine, SAM and Taurine Metabolism	-0.07	0.40
14-HDoHE/17-HDoHE	Fatty Acid, Monohydroxy Fatty Acid Metabolism(Acyl Carnitine)	-0.07	0.25
palmitoylcarnitine (C16)	Fatty Acid Metabolism(Acyl Carnitine)	-0.07	0.05
16a-hydroxy DHEA 3-sulfate	Steroid	-0.07	-0.22
2-hydroxypalmitate	Fatty Acid, Monohydroxy	-0.07	0.11
glycerophosphoinositol*	Phospholipid Metabolism	-0.07	0.00
3-hydroxyisobutyrate	Leucine, Isoleucine and Valine Metabolism	-0.07	-0.20
laurylcarnitine (C12)	Fatty Acid Metabolism(Acyl Carnitine)	-0.06	0.31
2-hydroxylaurate	Fatty Acid, Monohydroxy	-0.06	-0.06
1-(1-enyl-palmitoyl)-2-palmitoleoyl-GPC (P-16:0/16:1)*	Plasmalogen	-0.06	0.01
linoleoyl-linoleoyl-glycerol (18:2/18:2) [1]*	Diacylglycerol	-0.06	0.03
tauroolithocholate 3-sulfate	Secondary Bile Acid Metabolism	-0.06	0.05
2-hydroxyphenylacetate	Phenylalanine and Tyrosine Metabolism	-0.06	0.38

cis-4-decenoylcarnitine (C10:1)	Fatty Acid Metabolism(Acyl Carnitine)	-0.06	0.22
palmitoyl-linoleoyl-glycerol (16:0/18:2) [2]*	Diacylglycerol	-0.06	0.53
sphingomyelin (d18:1/20:0, d16:1/22:0)*	Sphingolipid Metabolism	-0.06	0.33
lactosyl-N-palmitoyl-sphingosine (d18:1/16:0)	Sphingolipid Metabolism	-0.06	0.05
dehydroisoandrosterone sulfate (DHEA-S)	Steroid	-0.06	-0.29
ethylmalonate	Leucine, Isoleucine and Valine Metabolism	-0.06	0.18
2-aminobutyrate	Methionine, Cysteine, SAM and Taurine Metabolism	-0.05	0.33
phytanate	Food Component/Plant	-0.05	0.03
1-palmitoyl-2-oleoyl-GPE (16:0/18:1)	Phospholipid Metabolism	-0.05	0.41
ursodeoxycholate	Secondary Bile Acid Metabolism	-0.05	0.21
eicosapentaenoate (EPA; 20:5n3)	Polyunsaturated Fatty Acid (n3 and n6)	-0.05	0.19
serotonin	Tryptophan Metabolism	-0.05	-0.17
theanine	Food Component/Plant	-0.05	0.54
1-stearoyl-2-linoleoyl-GPE (18:0/18:2)*	Phospholipid Metabolism	-0.05	0.43
10-undecenoate (11:1n1)	Medium Chain Fatty Acid	-0.05	0.08
palmitate (16:0)	Long Chain Fatty Acid	-0.05	0.23
1-(1-enyl-stearoyl)-2-linoleoyl-GPE (P-18:0/18:2)*	Plasmalogen	-0.04	0.51
3-hydroxyoctanoate	Fatty Acid, Monohydroxy	-0.04	0.59
margarate (17:0)	Long Chain Fatty Acid	-0.04	0.28
hexanoylcarnitine (C6)	Fatty Acid Metabolism(Acyl Carnitine)	-0.04	0.51
1-oleoyl-GPC (18:1)	Lysolipid	-0.04	-0.09
10-heptadecenoate (17:1n7)	Long Chain Fatty Acid	-0.04	0.25
sphinganine	Sphingolipid Metabolism	-0.04	-0.19
linolenoylcarnitine (C18:3)*	Fatty Acid Metabolism(Acyl Carnitine)	-0.04	-0.08
vanillylmandelate (VMA)	Phenylalanine and Tyrosine Metabolism	-0.04	0.04
isoleucine	Leucine, Isoleucine and Valine Metabolism	-0.04	-0.17
gamma-glutamylglycine	Gamma-glutamyl Amino Acid	-0.03	-0.30
palmitoyl-docosahexaenoyl-glycerol (16:0/22:6) [1]*	Diacylglycerol	-0.03	0.38
beta-cryptoxanthin	Food Component/Plant	-0.03	0.15
dodecanedioate	Fatty Acid, Dicarboxylate	-0.03	0.07
sphingomyelin (d18:1/21:0, d17:1/22:0, d16:1/23:0)*	Sphingolipid Metabolism	-0.02	0.37
2,3-dihydroxyisovalerate	Food Component/Plant	-0.02	-0.22
4-imidazoleacetate	Histidine Metabolism	-0.02	-0.04
oleoyl-linoleoyl-glycerol (18:1/18:2) [2]	Diacylglycerol	-0.02	0.30
palmitoleoyl-arachidonoyl-glycerol (16:1/20:4) [2]*	Diacylglycerol	-0.02	0.13

arginine	Urea cycle; Arginine and Proline Metabolism	-0.02	0.11
2-linoleoylglycerol (18:2)	Monoacylglycerol	-0.02	-0.53
sphingomyelin (d18:2/24:1, d18:1/24:2)*	Sphingolipid Metabolism	-0.02	-0.14
palmitoyl-linoleoyl-glycerol (16:0/18:2) [1]*	Diacylglycerol	-0.02	0.47
pregnenolone sulfate	Steroid	-0.02	-0.27
1-palmitoyl-2-alpha-linolenoyl-GPC (16:0/18:3n3)*	Phospholipid Metabolism Fatty Acid Metabolism(Acyl Carnitine)	-0.02	0.19
3-hydroxybutyrylcarnitine (1)	Carnitine)	-0.02	0.52
1-(1-enyl-stearoyl)-2-oleoyl-GPE (P-18:0/18:1)	Plasmalogen Phenylalanine and Tyrosine Metabolism	-0.01	0.51
phenylpyruvate	Metabolism	-0.01	-0.24
3-methylhistidine	Histidine Metabolism	-0.01	0.20
stearoyl-arachidonoyl-glycerol (18:0/20:4) [1]*	Diacylglycerol	-0.01	0.50
caprate (10:0)	Medium Chain Fatty Acid	-0.01	0.49
oleoyl-linoleoyl-glycerol (18:1/18:2) [1]	Diacylglycerol	-0.01	0.28
N-acetylkynurenine (2)	Tryptophan Metabolism	-0.01	0.09
1-palmitoyl-2-arachidonoyl-GPC (16:0/20:4n6)	Phospholipid Metabolism	-0.01	0.02
palmitoyl-arachidonoyl-glycerol (16:0/20:4) [1]*	Diacylglycerol	0.00	0.48
21-hydroxypregnenolone disulfate	Steroid	0.00	-0.20
umbelliferone sulfate	Food Component/Plant	0.00	0.01

Supplementary Table 5. Pearson correlation coefficient between IL-1ra and all measured metabolites in the Null condition for both LTBI and TB.

TNF α signature
C3
CCL4
CD44
CD83
IRAK2
NFKB1
NFKB2
NFKBIA
NFKBIZ
POU2F2
RELB
SOCS3
SRC
TNFAIP3

Supplementary Table 6. Unique cytokine-induced gene signature derived from TNF single cytokine stimulation as previously described¹⁵.

Gene	p-value	q-value	Fold change
IL1A	3.43E-31	2.09E-28	212.311701
CCL20	3.54E-29	7.20E-27	300.568543
IL6	2.95E-29	7.20E-27	136.070461
IL1B	1.39E-28	2.13E-26	84.2357019
CCL19	4.53E-25	5.52E-23	23.7958806
IL10	2.52E-24	2.56E-22	22.4348548
CCL2	4.46E-22	3.89E-20	69.4070409
CXCL2	6.80E-21	5.19E-19	17.6122855
CXCL1	5.58E-20	3.78E-18	7.24472043
C3	2.52E-19	1.54E-17	25.3160454
CCL3	3.31E-19	1.84E-17	12.3458144
BATF3	7.24E-18	3.68E-16	10.3338066
CCL4	8.44E-18	3.96E-16	5.72422376
LILRB1	1.10E-16	4.80E-15	3.90816135
SOCS3	9.14E-16	3.72E-14	5.15177685
BATF	2.88E-15	1.10E-13	3.41543669
ADA	5.79E-14	1.96E-12	2.7834998
CD80	5.78E-14	1.96E-12	4.43455667
TNFSF15	1.98E-13	6.36E-12	16.4780084
SELPLG	2.90E-13	8.86E-12	0.37229031
IRAK2	5.89E-13	1.71E-11	6.46316131
LAMP3	8.68E-13	2.41E-11	5.92884047
PTGS2	1.04E-12	2.76E-11	14.6649475
LAIR1	2.07E-12	5.25E-11	2.13989502
POU2F2	3.79E-12	9.24E-11	2.26164102
CD1D	1.04E-11	2.45E-10	0.2482714
TNFAIP6	1.12E-11	2.53E-10	4.95347156
CCL22	1.36E-11	2.96E-10	7.0972002
NFKBIZ	1.47E-11	3.10E-10	3.13342401
NFKB1	1.78E-11	3.61E-10	3.07008809
EBI3	2.23E-11	4.39E-10	2.84525892
LILRB4	2.58E-11	4.91E-10	4.50950805
TNFRSF9	4.24E-11	7.84E-10	4.03643003
SRC	8.78E-11	1.57E-09	4.238783
MSR1	9.04E-11	1.58E-09	0.24770417
LILRA3	2.29E-10	3.87E-09	2.91298853
SLAMF7	4.28E-10	7.05E-09	2.76580607
CD40LG	1.66E-09	2.66E-08	0.57192069
TNF	4.27E-09	6.69E-08	2.29017836
FCER1A	5.09E-09	7.76E-08	0.23207131
CD14	5.23E-09	7.77E-08	2.14369557
CLEC5A	6.73E-09	9.55E-08	4.81805219

TRAF1	6.62E-09	9.55E-08	2.03390181
CCR2	7.78E-09	1.08E-07	0.33110713
IL2RA	7.98E-09	1.08E-07	4.1747798
CCL7	1.22E-08	1.62E-07	5.64608199
DUSP4	1.39E-08	1.81E-07	4.29974158
IL23A	2.00E-08	2.54E-07	4.27694314
NFKBIA	2.07E-08	2.58E-07	2.57754936
IL8	2.14E-08	2.62E-07	3.44525325
AHR	2.74E-08	3.27E-07	1.55085627
ALDH1A1	5.11E-08	5.99E-07	0.31581903
ICAM5	9.11E-08	1.05E-06	3.73567785
CXCL13	1.22E-07	1.35E-06	2.24874481
IRAK3	1.22E-07	1.35E-06	2.88747799
CD274	1.64E-07	1.79E-06	6.21347375
CDKN1A	1.67E-07	1.79E-06	3.60580151
PDCD1LG2	4.50E-07	4.74E-06	3.24891949
KCNJ2	7.52E-07	7.78E-06	3.48865275
CASP8	9.28E-07	9.44E-06	0.60129254
PLAU	1.04E-06	1.04E-05	7.67171924
RELB	1.72E-06	1.70E-05	2.1874802
CCRL2	1.86E-06	1.78E-05	3.64517996
CD40	1.87E-06	1.78E-05	2.21657161
TNFAIP3	2.13E-06	2.00E-05	2.01128837
TNFRSF4	2.23E-06	2.06E-05	2.53379536
TNFSF12	3.45E-06	3.14E-05	0.82198616
CASP2	3.94E-06	3.53E-05	0.77089325
CD46	4.33E-06	3.82E-05	0.60245566
IL7R	5.78E-06	4.96E-05	0.72868945
NFATC3	5.78E-06	4.96E-05	0.72909413
HLA.DMB	5.86E-06	4.97E-05	0.72039147
ICAM1	6.12E-06	5.11E-05	2.35325886
JAK3	6.48E-06	5.34E-05	1.63910012
IL16	6.67E-06	5.42E-05	0.68323606
MARCO	7.47E-06	6.00E-05	5.50605871
CSF3R	7.69E-06	6.09E-05	0.51794721
SELL	8.03E-06	6.28E-05	0.6690134
PYCARD	9.99E-06	7.72E-05	0.5088453
BID	1.18E-05	8.99E-05	2.97096169
S1PR1	1.59E-05	0.00011975	0.69552438
ITGA4	1.81E-05	0.00013479	0.76409875
IDO1	1.85E-05	0.00013584	2.51373061
CXCR2	2.25E-05	0.00016354	0.52178957
LILRA1	2.45E-05	0.00017617	2.45722501

IKBKE	2.63E-05	0.0001865	1.53738768
CYB561	3.04E-05	0.00021345	0.66560952
KLF2	3.60E-05	0.00024923	0.66820886
TICAM1	4.13E-05	0.00028295	1.97800218
CCL23	4.35E-05	0.00029163	2.11730627
CYBB	4.35E-05	0.00029163	1.4926294
IL1RN	4.83E-05	0.00031993	3.74745204
NFKB2	4.89E-05	0.00032091	1.91395377
CD36	5.50E-05	0.00035679	0.58312416
ATG7	5.86E-05	0.00037657	1.87104598
SELE	6.10E-05	0.00038737	1.53308961
FER1L3	6.28E-05	0.00039472	2.6818528
CTSS	7.77E-05	0.0004836	0.64444716
CD83	8.07E-05	0.0004923	1.86846557
IFIT2	8.07E-05	0.0004923	0.45531283
CISH	9.29E-05	0.00056106	2.81329332
GAS6	9.50E-05	0.00056824	1.47604225
CD244	0.00010707	0.0006341	0.72778338
BCL3	0.00012504	0.00073339	2.07021415
HLA.DMA	0.00012737	0.00073998	0.72211274
CCND3	0.00014055	0.00080884	0.77631712
SIGIRR	0.00017294	0.00098592	0.78599771
CASP10	0.00019282	0.00108908	1.85097323
LTB4R2	0.00019467	0.00108943	0.63438784
CLEC7A	0.00022668	0.00125702	0.6194544
TNFSF10	0.00029406	0.00161602	0.61687154
CCL18	0.00029984	0.00163304	1.43183676
PTAFR	0.00031731	0.00171291	1.62913479
CD82	0.00036271	0.00194083	1.80731
IL23R	0.00036593	0.00194101	2.08019679
CFD	0.00039919	0.00209919	0.41915334
ITGAL	0.00051134	0.00266596	0.71677539
CD96	0.00061903	0.00320007	0.78448023
ICOSLG	0.00065448	0.00335488	1.8685809
SPP1	0.00066704	0.00339079	5.24273659
CARD9	0.00071088	0.00358379	1.89067577
CXCL10	0.00071791	0.00358957	2.13308281
HPSE	0.00073118	0.00362619	2.09786235
HAVCR2	0.00075553	0.00367935	1.96191698
TGFBR2	0.00075583	0.00367935	0.72573864
VAMP5	0.00076	0.00367935	0.75889806
LCK	0.00079416	0.00381445	0.87109985
CD27	0.00085273	0.00406377	0.75457751

FCGRT	0.00089073	0.00421198	0.73925756
SOCS1	0.0009399	0.00441031	2.00084581
CD3E	0.00129682	0.00603863	0.77590935
LAG3	0.00140841	0.00650856	1.90832121
PECAM1	0.00150262	0.00689172	0.71562813
LHFPL2	0.00152647	0.00694886	2.37025136
KLRK1	0.0015997	0.00722827	0.81133409
CD22	0.00177202	0.00794803	2.39445935
ICAM3	0.0019465	0.0086669	0.74639282
IL1R2	0.00200718	0.00887232	1.76261942
CSF2	0.00229442	0.01006904	1.22930763
CCL5	0.0026367	0.01148848	0.74536035
CLEC6A	0.00274293	0.0118462	2.10609416
KLRB1	0.00275764	0.0118462	0.78962194
IGF2R	0.00297059	0.01267175	0.75002209
CD4	0.00300011	0.0127088	0.82125491
ABCB1	0.00307494	0.01293595	0.8313858
POLR1B	0.00319791	0.01336113	1.8567145
IL1R1	0.00324724	0.01341943	2.66620929
TLR2	0.00327786	0.01341943	1.55679825
sCTLA4	0.00327617	0.01341943	1.97778007
CD163	0.00335888	0.01365945	1.57298181
TLR9	0.00363583	0.01468779	0.56050961
IRF8	0.00368463	0.014787	0.7829239
FCAR	0.00385377	0.0153647	1.38541194
C1QB	0.00416485	0.01628563	1.7231377
IFNA1.13	0.00415787	0.01628563	1.22245725
MBP	0.0041368	0.01628563	0.79074532
CD247	0.00429836	0.01659493	0.85589517
ICAM2	0.00427783	0.01659493	0.89108688
STAT6	0.00442326	0.01696974	0.70405303
ETS1	0.00461676	0.0176014	0.82120368
TRAF3	0.00468297	0.01774293	1.44733713
ZAP70	0.00475	0.0178858	0.81264434
GZMA	0.00484075	0.01800523	0.75953587
PSMB10	0.00481794	0.01800523	0.84883497
TCF7	0.00524422	0.01938772	0.80390393
IFNG	0.00571594	0.02075431	1.21169367
NLRP3	0.00565143	0.02075431	1.64264762
TNFSF8	0.00570429	0.02075431	1.46439223
CD5	0.00575757	0.02075554	0.82957309
ITGA6	0.00578433	0.02075554	1.18908924
FYN	0.00603091	0.02151377	0.7897243

MAP4K1	0.00640358	0.02244933	0.85128965
MAPK11	0.00638657	0.02244933	0.57492036
SH2D1A	0.00634492	0.02244933	0.82758476
TBX21	0.00649259	0.02263131	0.81782609
FCGR3A.B	0.00655248	0.02271103	0.65242591
PLAUR	0.00673515	0.02321153	1.90470689
IFNAR2	0.00679705	0.02329326	0.73547948
TRAF2	0.00737003	0.02511574	1.71960001
CXCR3	0.0075181	0.02537897	0.81245398
IL17F	0.00753048	0.02537897	1.10094317
NCF4	0.00771893	0.02587114	0.73172274
ENTPD1	0.00797935	0.02659783	0.66945316
NOTCH1	0.0080744	0.02676839	0.76211732
LEF1	0.00879035	0.0289844	0.89700691
CSF2RB	0.00902795	0.02950632	1.40375874
CXCL9	0.00909375	0.02950632	1.33990527
MAP4K2	0.00906815	0.02950632	0.82301292
CCR7	0.00931243	0.03005599	1.25983431
CD9	0.0103004	0.03306971	0.58875487
GBP2	0.0105318	0.03363559	0.69579201
IL12RB1	0.011472	0.0364475	0.60897927
SMAD3	0.0117892	0.0372612	1.28071991
ARHGDIB	0.0120456	0.03787534	0.85433097
TRAFD1	0.0121496	0.03800644	0.74259937
PML	0.0123071	0.03830271	0.76551789
LTBR	0.012402	0.03840213	2.00848815
IL6R	0.0125199	0.03857141	0.75910587
CD209	0.0132276	0.04053603	1.37714933
FCER1G	0.0132905	0.04053603	1.49507825
IL12B	0.0136527	0.04143357	1.22335744
MAPK1	0.0137494	0.04152047	0.80608116
HLA.C	0.0138663	0.04166721	0.71163926
KREMEN1	0.0142776	0.04269282	2.14163102
NFATC2	0.014464	0.04303922	0.80822451
PPBP	0.0147094	0.04355696	0.75049637
CXCR1	0.0154676	0.04558085	0.67646679
SDHA	0.015728	0.04612538	0.87478234
ARG2	0.0158037	0.04612563	1.61150088
ABL1	0.0171857	0.04992037	0.82545473
CD99	0.0179527	0.05190117	0.8267941
MR1	0.0181272	0.05215845	1.67273741
CCR1	0.0182493	0.05226325	1.67253452
CD28	0.0189324	0.05371518	0.86730721

NOD1	0.0189039	0.05371518	0.71072877
TRAF4	0.0194128	0.05482319	1.80643831
IL21R	0.0195709	0.05501497	1.58548255
BCL2L11	0.0206973	0.05791446	0.88999183
CTLA4.TM	0.0214969	0.05987721	1.80442979
CD44	0.0219813	0.06091361	1.29736012
FAS	0.0220687	0.06091361	0.71111214
BCL2	0.0225096	0.0618507	0.91879697
CLEC4A	0.0228753	0.06257369	1.44631318
DEFB1	0.0236658	0.06416061	0.82098571
TRAF5	0.0236122	0.06416061	0.9492829
PAX5	0.0245032	0.0658456	0.60878469
Sep-04	0.024423	0.0658456	0.57727473
CD79B	0.025349	0.06781969	0.7502774
DEFA1	0.0261553	0.06967132	0.68171377
ICOS	0.02676	0.07066494	1.54661702
KLRC2	0.026656	0.07066494	0.86731502
IL32	0.0280509	0.07343798	0.67748363
JAK2	0.0280509	0.07343798	0.79497257
CCR10	0.0285155	0.07433528	0.89192358
JAK1	0.0289307	0.0747785	0.82202888
RARRES3	0.0289307	0.0747785	0.94118589
CD3D	0.0298342	0.07675927	0.84863318
TNFRSF10C	0.0299487	0.07675927	0.75268911
BTLA	0.030411	0.07761803	0.87786804
HLA.DPB1	0.031956	0.0812215	0.81986655
TNFRSF8	0.0342048	0.08657646	1.70489041
LILRA2	0.0349853	0.08818609	0.82799503
CRADD	0.0358408	0.08997073	1.62697492
PDCD2	0.0361369	0.08997351	0.79849596
SMARCD3	0.0359919	0.08997351	0.58801709
MS4A1	0.0370005	0.09174921	0.83399636
XCR1	0.0371854	0.09183439	0.81753477
CEBPB	0.0376939	0.09271483	1.36084524
CD74	0.0388263	0.09511664	0.82851689
LTB4R	0.0401344	0.09792794	0.79819602
CREB5	0.0419357	0.10191545	0.70124622
CD276	0.0431552	0.10405009	1.59065727
IL28A.B	0.0430355	0.10405009	0.94951237
SLC2A1	0.0448919	0.10781126	1.70450996
IL13RA1	0.0455834	0.10904264	0.82272604
SMAD5	0.0464061	0.11057704	1.05105911
CLEC4E	0.0472501	0.11215004	1.35900616

NT5E	0.048583	0.11486678	1.67988098
TLR1	0.048968	0.11533004	0.80880735
IRF1	0.0500236	0.11736306	0.78108095
CX3CR1	0.0509164	0.11900002	0.79734942
CCL8	0.0512057	0.11921938	1.76455938
KIT	0.0518135	0.1201758	0.80363649
SLAMF6	0.0528695	0.12216059	0.81562393
BTK	0.0540587	0.12435033	0.84838205
KLRG2	0.0542249	0.12435033	0.86862598
IRF3	0.0561793	0.12787079	0.73040776
KLRG1	0.056164	0.12787079	0.70173295
CD58	0.057559	0.13052413	1.23379696
PTK2	0.0583616	0.13185399	0.83897981
IFNAR1	0.0597879	0.13457793	1.34815558
APOL6	0.0612457	0.13735249	0.79885911
HLA.A	0.0616672	0.13779118	0.83238104
CD55	0.0624808	0.13909959	0.69885206
CSF1R	0.0630671	0.13938743	1.65715666
STAT5B	0.062946	0.13938743	0.82923964
MME	0.0633755	0.13956338	0.66101871
GBP5	0.0655693	0.14387508	0.70290566
CD24	0.0669112	0.1457778	0.88280579
PSMB8	0.0669144	0.1457778	0.84504379
PSMB5	0.0682731	0.14820851	1.58611787
PSMB9	0.0701414	0.1517243	0.81242357
TNFRSF13C	0.0730081	0.15736728	0.88096707
CAMP	0.073963	0.15886419	0.688927
STAT2	0.0769787	0.16476143	0.86756094
CASP1	0.0805956	0.17070638	1.23722937
TLR8	0.0800706	0.17070638	0.75788192
TMEM173	0.0805958	0.17070638	0.94737703
IKBKAP	0.0810036	0.17097646	0.94802598
ATM	0.0819438	0.17236454	0.71593722
GBP4	0.0838049	0.1756735	0.80465764
CEACAM1	0.0841446	0.17578153	1.64022532
KLRF2	0.0844598	0.17583781	1.07387644
C4A.B	0.0850947	0.17655703	0.66902777
IL10RA	0.0879606	0.18188463	0.86882228
APOL1	0.0916957	0.18644833	0.87767821
CD79A	0.0911131	0.18644833	0.85576525
CD81	0.0916959	0.18644833	1.23170093
KLRC4	0.0916545	0.18644833	0.82044073
LILRB2	0.0911131	0.18644833	1.30401729

NCAM1	0.0922502	0.18695223	0.75256442
ETV7	0.0992554	0.20048276	0.63763115
CD45RB	0.103348	0.20806033	1.15826792
BCL6	0.106602	0.21390533	1.33763732
RAF1	0.109264	0.21781386	0.82334329
TIGIT	0.109264	0.21781386	0.89377029
ITGB2	0.111978	0.222497	0.83965874
TGFB1	0.113355	0.22450179	0.82002967
IL6ST	0.114396	0.22583029	1.15947925
CTNNB1	0.115445	0.22716597	1.15382306
IL1RL1	0.118917	0.23259965	1.51005487
TNFSF13B	0.118969	0.23259965	0.98631139
MALT1	0.124109	0.24187377	0.91407852
PRF1	0.126352	0.24546089	0.84738765
CD53	0.128627	0.24908721	1.24482765
CMKLR1	0.131754	0.25419681	0.69474287
HLA.DRA	0.132099	0.25419681	1.13061755
C14orf166	0.135246	0.25943415	0.90161911
PSMC2	0.137242	0.26243768	1.21821942
IL7	0.139108	0.26517462	0.88131948
HLA.B	0.139667	0.26541081	0.84691847
AIRE	0.14086	0.26684658	0.93640828
CD6	0.142125	0.26758102	0.90415812
MIF	0.142125	0.26758102	1.34301833
CCR5	0.143762	0.26941043	1.23552826
LIF	0.14398	0.26941043	1.81056879
IFITM1	0.148414	0.27601384	1.18226054
IRAK1	0.147986	0.27601384	1.43674796
DUSP3	0.150558	0.27915009	1.30344798
DEFB4A	0.156091	0.28593246	0.96618583
IL20	0.156091	0.28593246	0.97400494
RAG1	0.156091	0.28593246	0.97013566
THY1	0.156091	0.28593246	0.97783239
AICDA	0.160932	0.29079776	1.05879288
CXCL11	0.160932	0.29079776	1.06059173
FOXP3	0.162055	0.29079776	1.07763529
IRGM	0.159769	0.29079776	1.02710324
ITGAE	0.162031	0.29079776	0.98535241
NCR1	0.162084	0.29079776	0.89954789
SKI	0.160269	0.29079776	0.93711201
CD8B	0.164511	0.29428654	0.92099741
CD19	0.169493	0.29969919	0.74935642
CR1	0.168561	0.29969919	0.87422952

HLA.DPA1	0.169502	0.29969919	0.87315519
IKBKG	0.168561	0.29969919	0.94193082
VTN	0.170707	0.30095743	0.92160854
SCARF1	0.171381	0.30127496	1.45139378
TOLLIP	0.174265	0.30546451	0.94469799
ITLN1	0.176005	0.30763052	1.1476884
GNLY	0.179619	0.31305026	0.88972414
EGR2	0.180875	0.31434117	1.44450382
PDCD1	0.186736	0.323605	0.84438391
EDNRB	0.188065	0.32498484	1.34089848
S100A8	0.190179	0.32770958	1.18120961
CSF1	0.193623	0.33270431	0.87894208
PPIA	0.199035	0.34103272	1.25074439
STAT1	0.199588	0.34103272	0.82554514
IL4R	0.203877	0.34738818	1.23528163
FKBP5	0.20496	0.34821003	0.88890059
GFI1	0.205501	0.34821003	0.94422952
TYK2	0.206592	0.34908898	0.9034715
KLRC3	0.209884	0.35367193	0.8366476
LILRB3	0.216018	0.36300545	0.89537441
FCGR2B	0.217147	0.36390019	0.83392641
CD2	0.219988	0.36765118	0.94258158
TAP2	0.221706	0.36945722	0.88409787
TNFRSF1B	0.22228	0.36945722	1.19749032
TP53	0.223432	0.37036283	1.09566746
BCAP31	0.232212	0.38272745	0.95361954
C8G	0.23338	0.38272745	0.93350594
IL4	0.232643	0.38272745	0.91201408
PRKCD	0.233401	0.38272745	1.25379718
LTF	0.23699	0.38757078	0.79073599
CD3EAP	0.24763	0.40291069	0.95418499
LILRA6	0.247691	0.40291069	1.91359298
CXCR4	0.250498	0.40639303	0.86551876
B2M	0.254273	0.41033474	0.90280042
TNFRSF11A	0.254201	0.41033474	0.74298192
STAT4	0.264531	0.4257623	0.93657972
IKZF2	0.271007	0.43389572	1.12282259
RORC	0.27048	0.43389572	0.8406633
ATG5	0.278415	0.4445894	1.34550337
DPP4	0.289657	0.4613336	0.97334206
ATG16L1	0.292796	0.46511865	1.06504958
CXCR6	0.295033	0.46647775	1.43213056
IL13	0.295181	0.46647775	0.85225201

GZMK	0.296995	0.46813165	0.93233091
CD164	0.301243	0.4723862	0.91049185
NOD2	0.301243	0.4723862	1.29559876
IL12A	0.307525	0.48100064	0.97276741
FN1	0.310438	0.48431504	0.82616852
ANKRD22	0.31536	0.48847726	1.38419865
BAX	0.317864	0.48847726	0.94644869
CCBP2	0.318713	0.48847726	1.0254983
CD160	0.322005	0.48847726	0.86480094
CD45RA	0.324529	0.48847726	0.98905825
CD97	0.326022	0.48847726	0.93570684
CEACAM8	0.320801	0.48847726	0.74039445
IL19	0.325767	0.48847726	1.00189353
IL2	0.325767	0.48847726	1.034742
IL22	0.325767	0.48847726	1.0306703
IL26	0.320108	0.48847726	0.98735117
MAPK14	0.327519	0.48847726	0.96051297
MASP2	0.325767	0.48847726	1.00370646
PIGR	0.320108	0.48847726	0.99101555
PLA2G2A	0.320108	0.48847726	0.98075405
RAG2	0.320108	0.48847726	0.99101555
UBE2L3	0.32752	0.48847726	1.00654362
VCAM1	0.324406	0.48847726	1.02351468
TLR3	0.329242	0.48865601	1.0528462
XBP1	0.329022	0.48865601	1.19473529
TIRAP	0.330712	0.48964641	0.84712689
LILRA5	0.33204	0.49042228	1.14940163
CASP4	0.335075	0.49225094	1.1406973
IL1RAP	0.335075	0.49225094	1.19323815
TLR5	0.335699	0.49225094	0.83518517
HLA.DQA1	0.34947	0.51121511	1.12992421
LY96	0.360797	0.52517369	0.90837065
NFATC1	0.361595	0.52517369	0.97400852
TFRC	0.361595	0.52517369	0.94366474
RELA	0.3648	0.52857007	1.20784221
GUSB	0.372888	0.53784839	0.96927289
XCL1	0.372967	0.53784839	1.01761723
C2	0.375812	0.54067292	1.2932077
CHITA	0.381735	0.547902	0.88459194
ITGA2B	0.385545	0.55207148	0.8647416
CFP	0.387724	0.55259729	1.11296868
TAP1	0.387724	0.55259729	0.87414408
GPI	0.389394	0.55368378	1.16969954

IL18RAP	0.391068	0.55477088	1.16180907
CFB	0.396128	0.56007461	1.02194057
IL28A	0.396643	0.56007461	0.9261495
PDGFB	0.398913	0.56197905	1.07397991
ATG12	0.41275	0.57893067	0.85002784
CCL13	0.412844	0.57893067	1.02274331
GATA3	0.417817	0.58411339	0.88218125
TLR4	0.418455	0.58411339	0.97002504
CEACAM6	0.420253	0.58528386	0.81710138
IL2RG	0.423713	0.58875838	1.15033494
CCR6	0.42698	0.59194955	0.98689219
KLRC1	0.428002	0.59202091	0.99556623
TAGAP	0.436131	0.60190025	0.98777742
MCL1	0.437922	0.60300772	1.12754186
CD70	0.442715	0.60686775	0.89480486
IL11RA	0.442156	0.60686775	0.81014778
CHUK	0.446033	0.6080529	0.91815778
CTSG	0.445258	0.6080529	0.88108677
HRAS	0.44657	0.6080529	1.20391874
SLAMF1	0.468797	0.6368957	1.23558906
TBP	0.472742	0.63940714	1.01935516
TGFBR1	0.471807	0.63940714	0.92797896
HLA.DRB1	0.474617	0.64052294	1.12235184
TNFRSF13B	0.479907	0.64623238	1.18562766
KIR3DL1	0.482274	0.6479893	1.08763539
KLRF1	0.483841	0.64866596	1.05579116
ITGAM	0.484996	0.64878851	1.15067627
IFIH1	0.487849	0.651177	1.19095673
IL15	0.494111	0.65809544	0.99043431
IRF5	0.500886	0.66473557	1.24508135
RUNX1	0.501276	0.66473557	1.24443165
IKZF1	0.504179	0.6671349	1.08122741
LACTB	0.507091	0.66953574	1.12421347
HLA.DOB	0.523646	0.68990078	1.31224854
CALML4	0.531688	0.69898638	1.02623384
STAT3	0.536685	0.70403839	1.06416569
C4BPA	0.548442	0.71791764	1.13857395
BLNK	0.551223	0.7189473	1.14149219
C6	0.553943	0.7189473	1.173026
NFIL3	0.552816	0.7189473	1.10844562
ZBTB16	0.553341	0.7189473	0.98897092
CCL15	0.563694	0.72542899	1.02126035
CX3CL1	0.563694	0.72542899	1.02102012

GP1BB	0.562819	0.72542899	1.00555879
IFI35	0.563215	0.72542899	1.28270996
DEFB103A	0.568237	0.72667625	0.99825116
EOMES	0.567464	0.72667625	0.89731847
LGALS3	0.567123	0.72667625	1.20090831
HLA.DRB3	0.579526	0.7380185	0.91746943
SERPING1	0.578631	0.7380185	0.84752451
BST2	0.584731	0.74155075	0.9955756
TGFBI	0.584731	0.74155075	0.90999782
SYK	0.587865	0.74397853	0.99163273
TCF4	0.598361	0.75569402	0.95334857
MAF	0.603403	0.76048725	1.10522799
PTPN2	0.607888	0.76142029	1.14269312
PTPN22	0.607881	0.76142029	1.11340386
TRAF6	0.607888	0.76142029	0.97447002
LITAF	0.612142	0.7651775	0.9596249
ATG10	0.622806	0.77375084	1.18880163
CD7	0.621761	0.77375084	1.19495062
CR2	0.622305	0.77375084	1.07204763
LTA	0.628935	0.77977713	1.13401051
LILRA4	0.635623	0.78647065	0.89674518
S100A9	0.643367	0.79444103	1.08515866
HLA.DQB1	0.646359	0.79652321	1.12634751
ILF3	0.647726	0.79659851	1.02292048
CFH	0.657738	0.80404846	0.85253738
GPR183	0.657576	0.80404846	1.12008716
IRF7	0.656479	0.80404846	1.01799862
C5	0.661618	0.80717396	0.91560548
C1QA	0.664184	0.80868711	1.02361437
ICAM4	0.675353	0.82064807	0.92435504
CD86	0.678564	0.82291062	1.18018743
FADD	0.68175	0.82503285	0.90721852
MAP4K4	0.683019	0.82503285	1.1516657
CASP3	0.68748	0.82714556	1.00903177
CTSC	0.686365	0.82714556	1.05312844
BST1	0.691955	0.83089085	1.02081257
IFI16	0.698686	0.83568325	0.98304134
PTPN6	0.698686	0.83568325	0.9633485
NOTCH2	0.700935	0.83673258	1.01019156
C1QBP	0.703186	0.8377802	1.0741087
FCGR1A.B	0.708183	0.84208895	1.17109816
ACTA2	0.715336	0.8479308	1.01648195
PPARG	0.715876	0.8479308	0.92670496

CD59	0.725842	0.85806903	1.04673214
KCNJ15	0.733824	0.86582716	1.23034166
ARG1	0.764021	0.89971585	0.86905718
FCGR2A	0.771861	0.90371441	0.97498383
IKBKB	0.76948	0.90371441	1.07116186
PTPRC_all	0.771861	0.90371441	0.96544241
IL1RL2	0.776761	0.90592567	1.02843534
KIR3DL2	0.778205	0.90592567	1.02909338
MRC1	0.777206	0.90592567	1.17974986
APP	0.787	0.90713791	1.03746308
IRF4	0.7835	0.90713791	1.03826556
LCP2	0.785833	0.90713791	1.09603206
LILRB5	0.781927	0.90713791	0.99227114
MX1	0.788169	0.90713791	1.09320427
PRDM1	0.788169	0.90713791	1.04931054
PLA2G2E	0.800459	0.919548	1.00293577
B3GAT1	0.807183	0.9203395	0.98248658
CUL9	0.806889	0.9203395	1.19257914
IKZF3	0.80457	0.9203395	0.91413174
LOC389386	0.80457	0.9203395	0.97716494
BATF2	0.809272	0.92099985	1.08594497
STAT5A	0.817517	0.9286506	1.05717939
GBP6	0.821601	0.93155504	0.89799605
TBK1	0.823419	0.93188421	1.12946847
CD8A	0.828149	0.93204961	0.968047
CTLA4_all	0.825783	0.93204961	1.11452424
TNFSF4	0.826835	0.93204961	1.12303898
PSMD7	0.832884	0.93393243	0.98874898
TAPBP	0.832884	0.93393243	0.98977836
PDGFRB	0.83849	0.9384593	0.97786716
PTGER4	0.839998	0.9384593	1.06076472
PSMB7	0.856647	0.95356692	1.00243227
TNFRSF14	0.855455	0.95356692	1.02925253
ITGAX	0.868579	0.96508778	1.04980553
CD45RO	0.87336	0.96512609	1.02663383
FCGR2A.C	0.870969	0.96512609	1.04707472
ZEB1	0.872163	0.96512609	1.10315843
IL18	0.890158	0.98191027	1.01696117
GZMB	0.897333	0.98803814	0.98751913
ITGB1	0.899735	0.98889793	1.02570048
TAL1	0.902935	0.99063013	0.96736839
CCL24	0.906946	0.99146427	1.16864602
TNFRSF17	0.90635	0.99146427	1.01929115

EGR1	0.911509	0.99447646	0.97408191
KLRD1	0.912962	0.99447646	1.13724572
BCL10	0.981834	1	0.99146668
C1R	1	1	1
C1S	1	1	1
C7	1	1	1
C8A	1	1	1
C8B	1	1	1
C9	1	1	1
CCL11	1	1	1
CCL16	1	1	1
CCL26	1	1	1
CCR8	1	1	1
CCRL1	0.993459	1	0.9769923
CD1A	1	1	1
CD34	1	1	1
CD48	0.946747	1	1.05431641
CDH5	1	1	1
CFI	1	1	1
CLU	1	1	1
CXCL12	0.976741	1	0.97463052
DEFB103B	1	1	1
GBP1	0.950373	1	1.02038819
HAMP	1	1	1
HFE	1	1	1
IFNA2	1	1	1
IFNB1	1	1	1
IFNGR1	0.929841	1	1.01551595
IL17A	1	1	1
IL17B	1	1	1
IL18R1	0.956418	1	0.99622314
IL21	1	1	1
IL22RA2	1	1	1
IL27	0.996179	1	1.05060234
IL29	1	1	1
IL2RB	0.952791	1	1.01714186
IL3	0.993459	1	0.98962627
IL5	1	1	1
IL9	1	1	1
IRAK4	0.956418	1	1.07324764
ITGA5	0.943122	1	1.01115958
ITLN2	1	1	1
KIR3DL3	1	1	1

KLRAP1	0.951339	1	0.9944749
MAPKAPK2	0.969727	1	1.06804727
MASP1	1	1	1
MBL2	1	1	1
MUC1	1	1	1.03402667
MYD88	0.996366	1	0.99793393
NOS2	0.993459	1	0.97639668
TLR7	0.979226	1	1.01148386
TNFSF11	1	1	1.01017007

Supplementary Table 7. Comparison between Null and IL-1b-induced genes, showing p-value, q-value and fold change.

Gene	Pre-Tx (V1)			Post-Tx (V2)		
	p-value	q-value	Fold change	p-value	q-value	Fold change
RELB	8.61E-12	9.21E-10	4.89	0.0768	0.29	1.34
ICAM1	1.11E-10	1.98E-09	6.52	0.0719	0.29	1.56
IRAK3	1.11E-10	1.98E-09	6.58	0.0282	0.29	1.68
NFKB2	8.59E-11	1.98E-09	4.06	0.0548	0.29	1.52
NFKBIA	1.11E-10	1.98E-09	5.83	0.0383	0.29	1.57
TNFAIP3	3.84E-11	1.98E-09	5.52	0.0241	0.29	1.58
NFKB1	1.82E-10	2.79E-09	3.84	0.0819	0.29	1.53
ATG7	2.32E-10	3.11E-09	4.74	0.0719	0.29	1.47
CLEC5A	4.66E-10	5.54E-09	8.31	0.0930	0.29	1.72
CDKN1A	5.83E-10	6.24E-09	8.82	0.0629	0.29	1.88
BCL3	1.12E-09	9.21E-09	5.82	0.1957	0.45	1.26
CCRL2	1.12E-09	9.21E-09	10.45	0.0305	0.29	2.41
IL8	1.12E-09	9.21E-09	9.53	0.0261	0.29	2.24
NFKBIZ	1.38E-09	1.06E-08	4.79	0.0548	0.29	1.53
SRC	2.55E-09	1.82E-08	4.62	0.0873	0.29	1.61
TICAM1	4.58E-09	3.06E-08	4.21	0.2060	0.45	1.42
BATF	5.54E-09	3.29E-08	2.50	0.6751	0.87	0.99
IL1RN	5.54E-09	3.29E-08	9.93	0.0873	0.29	2.40
IRAK2	6.68E-09	3.57E-08	9.63	0.0412	0.29	2.30
JAK3	6.68E-09	3.57E-08	2.42	1.0000	1.00	1.02
CTSS	9.65E-09	4.49E-08	3.33	0.5340	0.78	1.17
PTGS2	9.65E-09	4.49E-08	18.16	0.0768	0.29	3.38
TNFAIP6	9.65E-09	4.49E-08	5.42	0.0511	0.29	1.83
CXCL2	1.38E-08	6.17E-08	12.59	0.0412	0.29	2.29
MARCO	2.54E-08	1.09E-07	20.91	0.4004	0.70	1.46
BID	2.77E-08	1.14E-07	2.99	0.2591	0.52	1.75
CCL20	3.27E-08	1.30E-07	13.80	0.0930	0.29	2.11
PLAU	4.56E-08	1.68E-07	24.71	0.0099	0.29	6.23
SOCS3	4.56E-08	1.68E-07	3.98	0.2765	0.55	1.36
TRAF1	5.37E-08	1.91E-07	3.27	0.0873	0.29	1.41
CXCL1	7.40E-08	2.55E-07	5.37	0.0930	0.29	1.70
CD14	1.86E-07	6.23E-07	3.02	0.2514	0.52	1.17
TNF	2.89E-07	9.39E-07	3.22	0.0673	0.29	1.57
CD46	5.11E-07	1.61E-06	2.79	0.9424	0.98	1.04
CASP8	5.88E-07	1.80E-06	2.23	0.9654	0.98	1.01
CD83	6.74E-07	1.95E-06	4.23	0.0819	0.29	1.70
POU2F2	6.74E-07	1.95E-06	2.46	0.3314	0.62	1.26
KCNJ2	8.85E-07	2.43E-06	3.93	0.1333	0.35	1.74
TNFSF15	8.85E-07	2.43E-06	12.98	0.0511	0.29	2.63
CSF3R	2.50E-06	6.69E-06	3.60	0.6751	0.87	0.92
IL1B	3.63E-06	9.46E-06	5.83	0.1333	0.35	1.81

CCL3	4.62E-06	1.18E-05	6.01	0.0511	0.29	2.26
FCER1A	4.93E-06	1.23E-05	0.09	0.5102	0.78	1.80
SLAMF7	5.21E-06	1.27E-05	3.80	0.1258	0.35	1.81
LILRB4	5.87E-06	1.39E-05	2.64	0.3462	0.63	1.30
CD274	6.60E-06	1.50E-05	5.95	0.0816	0.29	4.00
FER1L3	6.60E-06	1.50E-05	4.14	0.8060	0.95	0.75
S1PR1	9.34E-06	2.08E-05	0.34	0.7837	0.93	1.19
CD36	1.17E-05	2.51E-05	2.98	0.2514	0.52	1.34
CXCR2	1.17E-05	2.51E-05	3.61	0.6751	0.87	0.92
CD244	2.81E-05	5.89E-05	1.93	0.9424	0.98	1.10
ICAM5	3.93E-05	8.09E-05	12.63	0.0149	0.29	3.74
C3	4.71E-05	9.52E-05	4.26	0.4648	0.75	1.35
IL16	7.03E-05	0.0001	1.93	0.8738	0.97	0.98
CCL7	0.0001	0.0002	2.68	0.6268	0.86	1.47
CD40	0.0002	0.0003	1.75	0.1186	0.33	1.26
CCND3	0.0002	0.0004	2.16	0.8151	0.95	0.94
NFATC3	0.0002	0.0004	1.67	0.7837	0.93	1.02
CYBB	0.0002	0.0004	1.58	0.9195	0.98	1.02
IKBKE	0.0002	0.0004	1.56	0.5532	0.80	1.13
IL6	0.0003	0.0006	4.94	0.0378	0.29	3.96
CCL4	0.0004	0.0008	3.22	0.0383	0.29	2.15
IFIT2	0.0007	0.0011	3.28	0.9650	0.98	1.32
CASP2	0.0010	0.0017	1.59	0.8966	0.97	1.01
IL7R	0.0013	0.0021	1.46	0.5340	0.78	1.13
IL1A	0.0016	0.0026	3.41	0.1186	0.33	2.50
LILRB1	0.0023	0.0036	1.69	0.1118	0.33	1.70
CCL19	0.0028	0.0044	0.24	0.2195	0.47	1.62
LAIR1	0.0032	0.0050	1.51	0.8966	0.97	0.95
SELE	0.0035	0.0053	2.58	0.1408	0.35	1.49
SELL	0.0046	0.0069	1.66	0.7616	0.93	0.86
KLF2	0.0060	0.0089	1.68	0.6334	0.86	0.92
CXCL13	0.0106	0.0155	0.36	0.4326	0.74	1.67
IL2RA	0.0135	0.0193	1.55	0.0871	0.29	2.76
ITGA4	0.0133	0.0193	1.38	0.5728	0.81	1.34
CD80	0.0216	0.0304	0.42	0.1483	0.36	1.84
IL23A	0.0220	0.0306	2.50	0.6928	0.87	2.00
TNFSF12	0.0262	0.0359	1.48	0.3462	0.63	0.91
LILRA3	0.0276	0.0374	1.57	0.8285	0.95	1.18
LILRA1	0.0280	0.0375	0.31	0.4646	0.75	0.62
CCL23	0.0344	0.0455	0.42	0.3250	0.62	1.50
CD40LG	0.0396	0.0517	1.48	0.6964	0.87	1.26
ADA	0.0437	0.0557	1.30	0.9885	1.00	0.93
IDO1	0.0437	0.0557	1.34	0.1118	0.33	1.73

AHR	0.0482	0.0607	1.28	0.5151	0.78	1.17
DUSP4	0.0505	0.0628	3.28	0.0299	0.29	3.63
PDCD1LG 2	0.1326	0.1630	2.27	0.5709	0.81	1.59
CCL22	0.1470	0.1729	0.94	0.6541	0.87	1.44
CD1D	0.1462	0.1729	0.41	0.6253	0.86	0.76
IL10	0.1470	0.1729	1.76	0.5193	0.78	1.23
SIGIRR	0.1426	0.1729	0.88	0.4604	0.75	0.87
HLA.DMB	0.1615	0.1878	1.23	0.7837	0.93	1.15
CCL2	0.1660	0.1889	0.65	0.4965	0.78	1.59
PYCARD	0.1643	0.1889	0.87	0.8491	0.97	0.86
ALDH1A1	0.1770	0.1993	1.51	0.8951	0.97	0.95
HLA.DMA	0.2209	0.2462	1.35	0.8738	0.97	0.94
CCR2	0.2419	0.2668	0.46	0.2060	0.45	0.81
SELPLG	0.3421	0.3735	0.60	0.3570	0.64	0.66
TNFRSF9	0.4347	0.4698	1.29	0.1360	0.35	2.14
LAMP3	0.4412	0.4721	0.44	0.0930	0.29	2.19
BATF3	0.4652	0.4928	1.06	0.4384	0.74	1.59
CISH	0.4988	0.5233	1.48	0.1543	0.36	2.55
EBI3	0.6138	0.6376	1.38	0.3287	0.62	1.83
MSR1	0.6240	0.6420	0.87	0.4733	0.76	1.50
GAS6	0.6462	0.6585	1.02	0.9509	0.98	0.97
TNFRSF4	0.9430	0.9519	1.03	0.1558	0.36	1.93
CYB561	0.9601	0.9601	0.82	0.6823	0.87	1.10

Supplementary Table 8. List of differentially expressed genes between LTBI and TB that are induced by IL-1b, with their respective p and q values, as well as fold-change.