

Table 3. LPS-responsive genes of known or inferred function

Gene	Description	Functional category	Fold change*
gjb1	Gap junction membrane channel protein beta 1	Cell-Cell communication	0.2
cldn3	claudin 3	Cell-Cell communication	0.27
ceacam1	CEA-related cell adhesion molecule 1 (C-CAM)	Cell-Cell communication	0.52
itgb1	Integrin beta 1 (fibronectin receptor beta)	Cell-Cell communication	0.7
sparc	secreted acidic cysteine rich glycoprotein	Cell-Cell communication	3
ninj1	Ninjurin 1	Cell-Cell communication	3.1
gja1	Gap junction membrane channel protein alpha 1	Cell-Cell communication	5
itgb4bp	Integrin beta 4 binding protein	Cell-Cell communication	10
vcam1	vascular cell adhesion molecule-1 mRNA	Cell-Cell communication	10
cldn1	claudin 1	Cell-Cell communication	D
cdh2	cadherin 2	Cell-Cell communication	D
icam1	Intercellular adhesion molecule 1 (ICAM-1)	Cell-Cell communication	I
vamp8	Vesicle-associated membrane protein 8	Cellular processes	0.14
abcd3	ATP-binding cassette, sub-family D (ALD), member 3	Cellular processes	0.22
cideb	Cell death-inducing DNA fragmentation factor, alpha subunit-like e	Cellular processes	0.26
calt	caltractin, calcium binding protein	Cellular processes	0.26
cbx3	Chromobox homolog 3 (Drosophila HP1 gamma)	Cellular processes	0.26
ccni	cyclin I	Cellular processes	0.27
orc4	Origin recognition complex, subunit 4	Cellular processes	0.29
mcm3ap	Minichromosome maintenance deficient (S. cerevisiae) 3-associat	Cellular processes	0.3
M29260	histone 1-0	Cellular processes	0.3
pex13	Peroxisomal biogenesis factor 13	Cellular processes	0.3
cdc42	cell division cycle 42 homolog (S. cerevisiae)	Cellular processes	0.31
ccng2	Cyclin G2	Cellular processes	0.32
gm2a	GM2 ganglioside activator protein	Cellular processes	0.33
pxmp2	peroxisome membrane protein (PMP22) gene	Cellular processes	0.35
pex7	Peroxisome biogenesis factor 7	Cellular processes	0.37
cradd	CASP2 and RIPK1 domain containing adaptor with death domain	Cellular processes	0.42
rab9	RAB9, member RAS oncogene family	Cellular processes	0.43
lamp2	Lysosomal membrane glycoprotein 2	Cellular processes	0.46
vamp8	Vesicle-associated membrane protein 8	Cellular processes	0.5
rab11b	RAB11b, member ras oncogene family	Cellular processes	0.53
lamp2	lysosomal membrane glycoprotein-type B	Cellular processes	0.58
rab11a	RAB11a, member RAS oncogene family	Cellular processes	0.58
spc18	Signal peptidase complex (18kD)	Cellular processes	0.6
xpa	xeroderma pigmentosum, complementation group A	Cellular processes	0.7
dpp7	Dipeptidyl peptidase 7	Cellular processes	0.7
pex14	Peroxisomal biogenesis factor 14	Cellular processes	0.82
psap	prosaposin (psap\SGP-1) gene	Cellular processes	0.84
supt4h2	suppresor of Ty4 homolog 2	Cellular processes	1.5
emd	emerin	Cellular processes	1.5
bcl2l	Bcl-xL	Cellular processes	3
mdm2	transformed mouse 3T3 cell double minute 2	Cellular processes	3
apex	apurinic/aprimidinic endonuclease	Cellular processes	3
bax	Bcl2-associated X protein	Cellular processes	4
tieg	TGF beta inducible early growth response, transcription factor	Cellular processes	5
h3f3b	Histone H3.3 (AA 1 - 136)	Cellular processes	5.7
cd63	CD63 antigen	Cellular processes	6
smarcb1	SWI/SNF related, matrix associated, actin dependent regulator of	Cellular processes	6.1

mlp	MARCKS-like protein	Cellular processes	8.7
ifi204	Interferon activated gene 204	Cellular processes	13
btg3	B-cell translocation gene 3	Cellular processes	13
flot1	caveolae-associated integral membrane protein, Flotillin 1	Cellular processes	22
h1f2	histone H1 gene	Cellular processes	D
mpg	N-methylpurine-DNA glycosylase	Cellular processes	D
gdi2	Guanosine diphosphate (GDP) dissociation inhibitor 2	Cellular processes	D
impnb	importin beta	Cellular processes	D
asgr2	asialoglycoprotein receptor 2	Cellular processes	D
bag3	Bcl2-associated athanogene 3	Cellular processes	I
birc3	Baculoviral IAP (inhibitor of apoptosis protein) repeat-containing 3	Cellular processes	I
hist1	Histone gene complex 1	Cellular processes	I
exo70	Exocyst component protein 70 kDa homolog (<i>S. cerevisiae</i>)	Cellular processes	I
mcrs1	Microspherule protein 1	Cellular processes	I
plscr2	phospholipid scramblase 2	Cellular processes	2.8
tubb2	Tubulin, beta 2	Cytoskeleton	0.16
diap1	Diaphanous homolog 1 (<i>Drosophila</i>)	Cytoskeleton	0.22
myo1b	Myosin I	Cytoskeleton	0.26
myhca	myosin heavy chain	Cytoskeleton	0.33
dncic1	Dynein, cytoplasmic, intermediate chain 1	Cytoskeleton	0.44
tuba6	Tubulin alpha 6	Cytoskeleton	0.66
actx	A-X actin	Cytoskeleton	2
actg2	smooth muscle gamma-actin gene	Cytoskeleton	2
actb	cytoplasmic beta-actin	Cytoskeleton	2.5
actb	cytoplasmic beta-actin	Cytoskeleton	2.5
dsn	destrin, sid23p	Cytoskeleton	2.5
actb	cytoplasmic beta-actin	Cytoskeleton	2.5
acta1	skeletal alpha-actin gene	Cytoskeleton	2.5
map1lc3	microtubule associated protein 1 light chain 3	Cytoskeleton	3
tmsb4x	thymosin beta 4; actin monomer binding protein	Cytoskeleton	3.1
actc1	Actin, alpha, cardiac	Cytoskeleton	3.4
actb	cytoplasmic beta-actin	Cytoskeleton	3.5
actg	gamma-actin	Cytoskeleton	4.1
map11c3	Microtubule-associated protein 1 light chain 3	Cytoskeleton	4.4
myh9	Myosin heavy chain IX	Cytoskeleton	4.5
tmsb10	Thymosin, beta 10	Cytoskeleton	5.2
klc1	kinesin light chain 1 (Klc1)	Cytoskeleton	D
cof2	cofilin 2	Cytoskeleton	D
fkbp4	FK506 binding protein 4 (59 kDa)	Defense and immunity	0.1
fkbp4	FK506 binding protein 4 (59 kDa)	Defense and Immunity	0.13
serpind1	heparin cofactor II precursor (HCII), serpin (serine protease inhibitor)	Defense and immunity	0.14
klkb1	plasma kallikrein (PK)	Defense and Immunity	0.17
prealbumin	prealbumin	Defense and immunity	0.2
sdf1	Stromal cell derived factor 1	Defense and Immunity	0.24
tfpi2	placental protein 5 / tissue factor pathway inhibitor-2	Defense and Immunity	0.29
c9	C9, complement component 9	Defense and Immunity	0.29
f7	coagulation factor VII	Defense and Immunity	0.3
lyzs	lysozyme	Defense and immunity	0.31
f13b	Coagulation factor XIII, beta subunit	Defense and Immunity	0.32
itih1	inter-alpha-trypsin inhibitor H1 chain.	Defense and Immunity	0.33
daf1	decay accelerating factor 1	Defense and immunity	0.47
f5	Coagulation factor V	Defense and immunity	0.5
fkbp9	FK506 binding protein 9	Defense and immunity	0.62

fkbp1a	FK506 binding protein 1a (12 kDa)	Defense and immunity	0.8
cd52	CD52 antigen, B7	Defense and immunity	0.8
aip	Aryl-hydrocarbon receptor-interacting protein	Defense and immunity	1.1
C1r	complement component 1, r subcomponent	Defense and immunity	1.5
scya19	small inducible cytokine A19	Defense and immunity	1.5
lat	linker for activation of T cells	Defense and immunity	1.5
Psme2	proteasome activator PA28 beta subunit	Defense and immunity	2
ctss	cathepsin S	Defense and immunity	2
c1r	Complement component 1, r subcomponent	Defense and immunity	2
serping1	C1 inhibitor	Defense and immunity	2
h2-d1	H-2 histocompatibility antigen fragment (aa 44-358)	Defense and immunity	2.5
crp	C-reactive protein, petaxin related	Defense and immunity	2.9
xbp1	X-box binding protein 1	Defense and immunity	3
psme1	PA28 alpha subunit	Defense and immunity	3
ctsc	Cathepsin C (dipeptidyl peptidase)	Defense and immunity	3
spp1	Secreted phosphoprotein 1	Defense and immunity	3.3
abca1	ATP-binding cassette, sub-family A (ABC1), member 1	Defense and immunity	3.5
klkbop	kallikrein binding protein	Defense and immunity	3.5
pfc	Properdin factor, complement	Defense and immunity	3.5
spi6	Serine protease inhibitor 6	Defense and immunity	3.6
H-2K-f	MHC (A.CA/J(H-2K-f) class I antigen	Defense and immunity	3.7
itih4	inter alpha-trypsin inhibitor, heavy chain 4	Defense and immunity	3.8
slpi	Secretory leukocyte protease inhibitor	Defense and immunity	3.8
lgals8	Lectin, galactose binding, soluble 8	Defense and immunity	3.9
sod2	manganese superoxide dismutase (MnSOD) gene	Defense and immunity	4
timp3	tissue inhibitor of metalloproteinase 3	Defense and immunity	4.5
hif1a	Hypoxia inducible factor 1, alpha subunit	Defense and immunity	4.8
sap	amyloid P component precursor	Defense and immunity	4.9
tapbp	TAP binding protein, tapasin	Defense and immunity	5
orm1	alpha-1 acid glycoprotein (Agp-1B), orosomuroid 1	Defense and immunity	5
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spi2-rs1	serine protease inhibitor 2.4.	Defense and immunity	5
hif1a	hypoxia-inducible factor one alpha	Defense and immunity	5
mt2	metallothionein 2	Defense and immunity	5.5
psmb10	proteasome subunit, beta type 10	Defense and immunity	6
Ppicap	peptidylprolyl isomerase C-associated protein (Mama)	Defense and immunity	6.5
psmb8	proteasome subunit, beta type 8 (Lmp7)	Defense and immunity	7
lcn2	Lipocalin 2	Defense and immunity	7.7
lbp	LPS-binding protein.	Defense and immunity	8
mt1	Metallothionein-I (three exons).	Defense and immunity	8
spi2	Serine protease inhibitor 2	Defense and immunity	9
abcb2	ATP-binding cassette, sub-family B (MDR/TAP), member 2	Defense and immunity	11
col4a-1	type IV collagen alpha-1	Defense and immunity	12
spi2	spi2 serine proteinase inhibitor (spi2/eb4)	Defense and immunity	20
gadd45g	Growth arrest and DNA-damage-inducible 45 gamma	Defense and immunity	21
fkbp5	FK506 binding protein 5	Defense and immunity	33
saa1	serum amyloid A-1	Defense and immunity	50
gro1	secretory protein KC precursor	Defense and immunity	70
gro1	secretory protein KC precursor	Defense and immunity	80
saa2	serum amyloid A protein isoform 2 mRNA	Defense and immunity	85
scyb9	Interferon gamma induced monokine, MIG	Defense and immunity	100
saa3	serum amyloid A 3 protein.	Defense and immunity	100
mrc1	macrophage mannose receptor	Defense and Immunity	D

abcb3	ATP-binding cassette, sub-family B (MDR/TAP), member 3	Defense and immunity	1
epcr	endothelial cell activated protein C receptor	Defense and immunity	1
s100a11	S100 calcium binding protein A11 (calizzarin), EMAP	Defense and immunity	1
il1b	interleukin 1 beta	Defense and immunity	1
saa4	serum amyloid A	Defense and immunity	1
lcn2	Lipocalin 2	Defense and immunity	1
cd14	CD14 mRNA for myelid cell-specific leucine-rich glycoprotein.	Defense and immunity	1
marco	Macrophage receptor with collagenous structure	Defense and immunity	1
ctla2b	Cytotoxic T lymphocyte-associated protein 2 beta	Defense and immunity	1
spi2	spi2 proteinase inhibitor (spi2/eb1)	Defense and immunity	1
sdca4	Syndecan 4	Extracellular matrix	4.2
fn1	fibronectin	Extracellular Matrix	2.5
col4a2	procollagen alpha-2(IV) chain.	Extracellular matrix	2.5
col15a1	Procollagen, type XV	Extracellular matrix	0.32
fbn1	Fibrillin 1	Extracellular matrix	0.26
reln	reelin	Extracellular matrix	0.13
zap70	Zeta-chain (TCR) associated protein kinase (70kD)	Intracellular signaling	0.11
sdf1	stromal cell derived factor 1	Intracellular signaling	0.12
tob1	transducer of ErbB-2.1	Intracellular signaling	0.15
ghr	growth hormone receptor/binding protein precursor	Intracellular signaling	0.17
lifr	Leukemia inhibitory factor receptor	Intracellular signaling	0.17
lifr	Leukemia inhibitory factor receptor	Intracellular signaling	0.21
pbx1	Pre B-cell leukemia transcription factor 1	Intracellular signaling	0.21
ctf1	Cardiotrophin-1	Intracellular signaling	0.23
nr1h3	Nuclear receptor subfamily1, Constitutive Androstane Receptor	Intracellular signaling	0.25
csf1r	Colony stimulating factor 1 receptor	Intracellular signaling	0.26
hnf6	hepatocyte nuclear factor 6 (one cut domain family member 1)	Intracellular signaling	0.27
nr1h3	Nuclear receptor subfamily1, Constitutive Androstane Receptor	Intracellular signaling	0.28
traf3	Tnf receptor-associated factor 3	intracellular signaling	0.29
sdf1	stromal cell derived factor 1	Intracellular signaling	0.3
pten	Protein-tyrosine phosphatase and tensin homolog	Intracellular signaling	0.3
tfdp1	DRTF-polypeptide-1, transcriptiona factor DP1	Intracellular signaling	0.4
ppara	Peroxisome proliferator activated receptor alpha	Intracellular signaling	0.45
tfdp1	DRTF-polypeptide-1, transcriptiona factor DP1	Intracellular signaling	0.5
ms4a2	Membrane-spanning 4-domains, subfamily A, member 2 (CD20)	Intracellular signaling	0.53
ncoa4	Nuclear receptor coactivator 4	Intracellular signaling	0.53
cebpb1-rs1	CCAAT/enhancer binding protein alpha (C/EBP), related sequence	Intracellular signaling	0.53
cbfb	Core binding factor beta	Intracellular signaling	0.53
pira3	Paired-Ig-like receptor A3	Intracellular signaling	0.55
sp3	Trans-acting transcription factor 3	Intracellular signaling	0.56
ctbp1	C-terminal binding protein 1	Intracellular signaling	0.7
rxra	retinoid X receptor-alpha (mRXR-alpha).	Intracellular signaling	0.8
akap	A kinase anchor protein; targeted to outer membrane of mitochor	Intracellular signaling	0.8
edg3	endothelial differentiation, sphingolipid G-protein-coupled receptor	Intracellular signaling	0.9
syk	protein tyrosine kinase	Intracellular signaling	1.5
csf1r	c-fms protein precursor (AA -19 to 957)	Intracellular signaling	2
sra1	Steroid receptor RNA activator 1	Intracellular signaling	2
klf3	Kruppel-like factor 3	Intracellular signaling	2
rab18	ras-related protein	Intracellular signaling	2.5
nab1	transcriptional repressor	Intracellular signaling	2.5
lnpp1	Inositol polyphosphate-1-phosphatase	Intracellular signaling	3
rela	Transcription factor p65 (NF-kappa-B p65), V-rel reticuloendothe	Intracellular signaling	3
madh1	homology of hSmad1;bsp-1, hMAD1, JV4-1 and MADR1	Intracellular signaling	3

junD1	Jun proto-oncogene related gene d1	Intracellular signaling	3.1
lcp2	Lymphocyte cytosolic protein 2 (Slp-76)	intracellular signaling	3.1
il1r2	Interleukin 1 receptor, type II	Intracellular signaling	3.2
Stat3	Signal transducer and activator of transcription 3	Intracellular signaling	3.3
tyrobp	TYRO protein tyrosine kinase binding protein (DAP12)	intracellular signaling	3.3
bhlhb2	Basic helix-loop-helix domain containing, class B2	Intracellular signaling	3.4
nek7	NIMA (never in mitosis gene a)-related expressed kinase 7	Intracellular signaling	3.6
tbk1	TANK-binding kinase 1	Intracellular signaling	3.9
tnfrsf1b	tumor necrosis factor receptor superfamily, member 1b	Intracellular signaling	3.9
ptp4a1	protein tyrosine phosphatase, PRL1	Intracellular signaling	4
AW046627	serine threonine kinase pim3	Intracellular signaling	4.2
ptpn2	Protein tyrosine phosphatase, non-receptor type 2	Intracellular signaling	4.3
osmr	oncostatin receptor	Intracellular signaling	4.6
cebpb	CCAAT/enhancer binding protein (C/EBP), bet	Intracellular signaling	4.6
egfr	Epidermal growth factor receptor	Intracellular signaling	4.8
cish2	suppressor of cytokine signalling-2 (SOCS-2)	Intracellular signaling	4.8
atf3	activating transcription factor 3	Intracellular signaling	4.9
il17r	interleukin 17 receptor	Intracellular signaling	5
mail	Molecule possessing ankyrin-repeats induced by lipopolysaccharide	Intracellular signaling	5
nfil3	nuclear factor, interleukin 3, regulated	Intracellular signaling	5
g3bp2-pendi	ras-GTPase-activating protein SH3-domain binding protein	Intracellular signaling	5
irf1	Interferon regulatory factor 1	Intracellular signaling	5.4
tnfrsf6	Tumor necrosis factor receptor superfamily, member 6	Intracellular signaling	6.4
ogfr	Opioid growth factor receptor	Intracellular signaling	6.4
stat1	signal transducer and activator of transcription 1	Intracellular signaling	6.5
ligp	Interferon gamma induced GTPase	Intracellular signaling	7
nfkbia	Nuclear factor of kappa light chain gene enhancer in B-cells inhibit	Intracellular signaling	7.4
gtpi	Interferon-g induced GTPase	Intracellular signaling	8.2
litaf-pending	LPS-induced TNF-alpha factor	Intracellular signaling	9
igfbp1	insulin-like growth factor binding protein-1.	Intracellular signaling	9.4
gas6	Growth arrest specific 6	Intracellular signaling	10
arhb	ras homolog B (RhoB)	Intracellular signaling	10
g3bp2-pendi	ras-GTPase-activating protein SH3-domain binding protein	Intracellular signaling	10
ligp	Interferon gamma induced GTPase	Intracellular signaling	12
mirf7	interferon regulatory factor 7	Intracellular signaling	12
etv6	Ets variant gene 6 (TEL oncogene)	Intracellular signaling	12.4
ifi1	Interferon inducible protein 1	Intracellular signaling	13
nfkbl1	Nuclear factor of kappa light chain gene enhancer in B-cells 1, p1C	Intracellular signaling	13
ll1r1	interleukin 1 receptor precursor	Intracellular signaling	15
igtp	Interferon gamma induced GTPase	Intracellular signaling	17
c/ebp delta	transcription factor	Intracellular signaling	20
pbef	Pre-B-cell colony-enhancing factor	Intracellular signaling	23
gbp3	homology to guanylate nucleotide binding protein 3	Intracellular signaling	25
tgtp	T-cell specific GTPase	Intracellular signaling	34
hegfl	Heparin binding epidermal growth factor-like growth factor	Intracellular signaling	D
vegfb	VEGF-related factor	Intracellular signaling	D
rras	Harvey rat sarcoma oncogene, subgroup R	Intracellular signaling	D
gnao	Guanine nucleotide binding protein, alpha o	Intracellular signaling	D
jak2	Janus kinase 2	Intracellular signaling	D
AW124627	homology to protein kinase C	Intracellular signaling	D
ptprf	tyrosine phosphatase LAR	Intracellular signaling	D
eng	Endoglin	Intracellular signaling	D
hes6	Hairy and enhancer of split 6	Intracellular signaling	D

mafj	V-maf musculoaponeurotic fibrosarcoma oncogene family, protein	Intracellular signaling	D
il1a	interleukin-1 alpha	Intracellular signaling	I
Scya3	Small inducible cytokine A3, MIP	Intracellular signaling	I
fst	Follistatin	Intracellular signaling	I
mtlrp	Motilin-related peptide	Intracellular signaling	I
il1rn	interleukin 1 receptor antagonist	Intracellular signaling	I
ralb	V-ral simian leukemia viral oncogene homolog B (ras related)	Intracellular signaling	I
gbp2	Interferon gamma induced GTPase	Intracellular signaling	I
AI854033	Highly similar to RAS-RELATED PROTEIN RAB-21	Intracellular signaling	I
ptpn1	Protein tyrosine phosphatase, non-receptor type 1	Intracellular signaling	I
mfnj	regulator of Notch signaling, Manic fringe homolog (Drosophila)	Intracellular signaling	I
btg2	B-cell translocation gene 2, antiproliferative	Intracellular signaling	I
ikbke	inhibitor of kappaB kinase epsilon	Intracellular signaling	I
amd2	S-adenosylmethionine decarboxylase.	Metabolism	0.02
alas2	Aminolevulinic acid synthase 2, erythroid	Metabolism	0.04
sc5d	Sterol-C5-desaturase homolog (lathosterol oxidase)	Metabolism	0.1
dbt	acyltransferase	Metabolism	0.1
fac12	long chain fatty acyl CoA synthetase	Metabolism	0.1
hal	Histidine ammonia lyase, histidase	Metabolism	0.11
agxt	Alanine-glyoxylate aminotransferase	Metabolism	0.12
mod1	malate NADP oxidoreductase	Metabolism	0.12
hgd	2,5-dihydroxyphenylacetate oxidase; dioxygenase	Metabolism	0.13
cyp3a25	cytochrome P450, 3a25.	Metabolism	0.13
gstm3	glutathione S-transferase (EC 2.5.1.18)	Metabolism	0.13
lce	long chain fatty acyl elongase	Metabolism	0.14
gclc	Glutamate-cysteine ligase	Metabolism	0.14
AW123955	homology to human glycine dehydrogenase	Metabolism	0.15
ak4	Adenylate kinase 4	Metabolism	0.15
dnase2a	Deoxyribonuclease II alpha	Metabolism	0.15
gstm6	glutathione S-transferase, mu6	Metabolism	0.15
sc5d	Sterol-C5-desaturase (fungal ERG3, delta-5-desaturase) homolog	Metabolism	0.16
cyp7b1	Cytochrome P450, 7b1	Metabolism	0.16
aldh1a7	aldehyde dehydrogenase family 1, subfamily A7	Metabolism	0.17
fpps	farnesyl pyrophosphate synthase	Metabolism	0.17
fn1	homology to fructose-bisphosphate aldolase	Metabolism	0.18
uox	urate oxidase (EC 1.7.3.3)	Metabolism	0.18
nudt9	Nudix (nucleoside diphosphate linked moiety X)-type motif 9	Metabolism	0.19
mHS	HMG CoA synthase	Metabolism	0.2
papss2	3'-phosphoadenosine 5'-phosphosulfate synthase 2	Metabolism	0.2
cryz	Quinone oxidoreductase, Crystallin, zeta	Metabolism	0.21
cyp2b10	Cytochrome P450, 2b10, phenobarbital inducible, type b	Metabolism	0.22
cyp4a14	Cytochrome P450, 4a14	Metabolism	0.22
fmo5	flavin-containing monooxygenase 5	Metabolism	0.22
fmo1	flavin-containing monooxygenase	Metabolism	0.22
adss1	adenylosuccinate synthetase	Metabolism	0.22
oaz2	Ornithine decarboxylase antizyme 2	Metabolism	0.22
taldo1	transaldolase 1	Metabolism	0.23
car3	carbonic anhydrase III	Metabolism	0.23
eno1	Enolase 1, alpha non-neuron	Metabolism	0.23
fpps	farnesyl pyrophosphate synthase	Metabolism	0.23
hsd17b5	Hydroxysteroid (17-beta) dehydrogenase 5	Metabolism	0.23
cpo	Coproporphyrinogen oxidase	Metabolism	0.23
cas1	catalase	Metabolism	0.23

spr	Sepiapterin reductase	Metabolism	0.24
comt	Catechol-O-methyltransferase (Comt)	Metabolism	0.24
gba	Acid beta glucosidase	Metabolism	0.24
cyp4a12	cytochrome P450, 4a12	Metabolism	0.24
fasn	Fatty acid synthase	Metabolism	0.24
sps2	Selenophosphate synthetase 2	Metabolism	0.25
pcmt1	Protein-L-isoaspartate (D-aspartate) O-methyltransferase 1	Metabolism	0.25
cals1	carbonic anhydrase-related polypeptide.	Metabolism	0.25
pcbd	6-pyruvoyl-tetrahydropterin synthase/dimerization cofactor of he	Metabolism	0.25
ldlr	Low density lipoprotein receptor	Metabolism	0.25
ivd	Isovaleryl coenzyme A dehydrogenase	Metabolism	0.25
bhmt2	Betaine-homocysteine methyltransferase 2	Metabolism	0.26
lapep	Leucine aminopeptidase	Metabolism	0.26
ugdh	UDPGDH; NAD ⁺ -linked oxidoreductase, UDP-glucose dehydrogenas	Metabolism	0.26
cpo	coproporphyrinogen oxidase	Metabolism	0.26
faci5	Fatty acid Coenzyme A ligase, long chain 5	Metabolism	0.26
hadhsc	L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain	Metabolism	0.26
aadac	Arylacetamide deacetylase (esterase)	Metabolism	0.26
gsta2	glutathione transferase (EC 2.5.1.18)	Metabolism	0.26
epx1	Epoxide hydrolase 1, microsomal	Metabolism	0.26
glo2	homology to hydroxyacyl glutathione hydrolase	Metabolism	0.27
adh4	Alcohol dehydrogenase 4 (class II)	Metabolism	0.27
AI182073	homology to carbamoyl-phosphate synthase	Metabolism	0.27
bhmt2	Betaine-homocysteine methyltransferase	Metabolism	0.28
pah	phenylalanine hydroxylase (AA 1-453)	Metabolism	0.28
elovl2	Elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3,	Metabolism	0.28
scd1	stearoyl-CoA desaturase	Metabolism	0.28
idh1	Isocitrate dehydrogenase 1 (NADP ⁺), soluble	Metabolism	0.28
gstt2	Glutathione S-transferase, theta 2	Metabolism	0.28
ass1	argininosuccinate synthetase (EC 6.3.4.5)	Metabolism	0.28
aldh3a2	aldehyde dehydrogenase (Ald3)	Metabolism	0.3
idi1	homology to isopentenyl-diphosphate delta isomerase	Metabolism	0.3
hsd17b10	Hydroxysteroid (17-beta) dehydrogenase 10	Metabolism	0.3
rdh7	Retinol dehydrogenase 7	Metabolism	0.3
fdft1	Farnesyl diphosphate farnesyl transferase 1	Metabolism	0.3
gamt	guanidinoacetate methyltransferase	Metabolism	0.3
enpp2	Ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin)	Metabolism	0.3
nme1	Expressed in non-metastatic cells 1, protein (NM23A) (nucleoside	Metabolism	0.3
kat2	Kynurenine aminotransferase II	Metabolism	0.31
rsdr1	Retinal short-chain dehydrogenase/reductase 1	Metabolism	0.31
impa1	Inositol (myo)-1(or 4)-monophosphatase 1	Metabolism	0.31
tdo2	Tryptophan 2,3-dioxygenase	Metabolism	0.32
ugt2b5	UDP-glucuronosyltransferase 2 family, member 5	Metabolism	0.32
aldh1a1	Aldehyde dehydrogenase family 1, subfamily A1	Metabolism	0.32
gstz1	Glutathione transferase zeta 1 (maleylacetoacetate isomerase)	Metabolism	0.32
adh1	alcohol dehydrogenase	Metabolism	0.32
tst	Thiosulfate sulfurtransferase, mitochondrial	Metabolism	0.32
mccc1	Methylcrotonoyl-Coenzyme A carboxylase 1 (alpha)	Metabolism	0.33
aldh3a2	Aldehyde dehydrogenase family 3, subfamily A2	Metabolism	0.33
fech	ferrochelataase	Metabolism	0.33
AI853364	homology to fatty acid desaturase 1	Metabolism	0.33
mttp	Microsomal triglyceride transfer protein	Metabolism	0.33
ela1	elastase 1	Metabolism	0.33

prdx5	peroxiredoxin 5	Metabolism	0.33
scd1	stearoyl-CoA desaturase	Metabolism	0.34
agpat1	1-acylglycerol-3-phosphate O-acyltransferase 1	Metabolism	0.34
cyp4a10	Cytochrome P450, 4a10	Metabolism	0.35
tpi	Triosephosphate isomerase	Metabolism	0.36
fpgs	Folylpolyglutamyl synthetase	Metabolism	0.37
ddt	D-dopachrome tautomerase	Metabolism	0.38
cyp51	Cytochrome P450, 51	Metabolism	0.4
gsta3	Glutathione S-transferase, alpha 3	Metabolism	0.41
es10	Esterase 10	Metabolism	0.41
gdc1	glycerol-3-phosphate dehydrogenase	Metabolism	0.43
pcyt1a	Phosphate cytidyltransferase 1, choline, alpha isoform	Metabolism	0.46
faah	fatty acid amide hydrolase	Metabolism	0.48
cte1	Cytosolic acyl-CoA thioesterase 1	Metabolism	0.48
pon 1	serum paraoxonase (Pon) mRNA	Metabolism	0.5
aki3l1-pending	Adenylate kinase 3 alpha like	Metabolism	0.53
acadl	Acetyl-Coenzyme A dehydrogenase, long-chain	Metabolism	0.57
mlycd	Malonyl-CoA decarboxylase	Metabolism	0.58
hk1	Hexokinase 1	Metabolism	0.63
dpm1	Dolichol-phosphate (beta-D) mannosyltransferase 1	Metabolism	0.64
gng3lg	G protein gamma 3 linked gene	Metabolism	0.65
ywhag	3-monooxygenase/tryptophan 5-monooxygenase activation protein	Metabolism	0.67
acate3-pending	mitochondrial acyl-CoA thioesterase 3	Metabolism	1.5
srr	serine racemase	Metabolism	1.9
ywhaq	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activat	Metabolism	2
siat9	sialyltransferase 9	Metabolism	3
ggcx	Gamma-glutamyl carboxylase	Metabolism	3.2
fabp4	adipose fatty acid binding protein	Metabolism	3.3
ldh1	Lactate dehydrogenase 1, A chain	Metabolism	3.4
qscn6	Quiescin Q6	metabolism	3.7
pcx	Pyruvate carboxylase	Metabolism	3.8
nnmt	nicotinamide N-methyltransferase	Metabolism	4
qscn6	Quiescin Q6	metabolism	4.2
txnip	Thioredoxin interacting protein	Metabolism	4.7
adfp	adipose differentiation related protein	Metabolism	5
sds	Serine dehydratase	Metabolism	5.2
pnp	purine nucleoside phosphorylase (Np-b)	Metabolism	5.5
apobec1	Apolipoprotein B editing complex 1	Metabolism	6
uck2	Uridine-cytidine kinase 2	Metabolism	6.3
sat	Spermidine/spermine N1-acetyl transferase	Metabolism	7.2
xdh	xanthine dehydrogenase	Metabolism	10
apoa4	apolipoprotein A-IV	Metabolism	15
lce	Long chain fatty acyl elongase	Metabolism	D
ddc	Dopa decarboxylase	Metabolism	D
indo	Indoleamine-pyrrole 2,3 dioxygenase	Metabolism	D
g6pc	glucose-6-phosphatase	Metabolism	D
car5a	Carbonic anhydrase 5a	Metabolism	D
car14	carbonic anhydrase	Metabolism	D
amy2	pancreatic alpha-amylase isozyme (aa 1-508)	Metabolism	D
cyp26a1	Cytochrome P450, 26, retinoic acid A1	Metabolism	D
mpdu1	mannose-P-dolichol utilization defect 1	Metabolism	D
hsd3b5	3-beta-hydroxysteroid dehydrogenase; 3-hydroxysteroid; ketoster	Metabolism	D
rdh6	CRAD1; cis-retinol/3alpha-hydroxysterol short-chain dehydrogena	Metabolism	D

hsd3b2	Hydroxysteroid dehydrogenase-2, delta<5>-3-beta	Metabolism	D
lp1	Lipoprotein lipase	Metabolism	D
gpat	glycerol-3-phosphate acyltransferase gene, nuclear gene encoding	Metabolism	D
acp6	Acid phosphatase 6, lysophosphatidic	Metabolism	D
cbr1	carbonyl reductase (Cbr1)	Metabolism	D
cry1	Cryptochrome 1 (photolyase-like)	Metabolism	D
sptlc2	Serine palmitoyltransferase, long chain base subunit 2	Metabolism	I
fmo3	Flavin containing monooxygenase 3	Metabolism	I
gpx3	Glutathione peroxidase 3	Metabolism	I
sth2	sulfotransferase, hydroxysteroid preferring 2	Metabolism	I
senp3	Sentrin/SUMO-specific protease	Protein degradation	0.54
psmb5	Proteasome (prosome, macropain) subunit, beta type 5	Protein degradation	0.57
ctsd	Cathepsin D	Protein degradation	0.7
psmd8	proteasome 26S subunit, non-ATPase, 8	Protein degradation	1.2
psma2	proteasome subunit, alpha type 2	Protein degradation	1.5
uble1	ubiquitin-like 1 activating enzyme E1B	Protein degradation	1.5
psmc3	proteasome (prosome, macropain) 26S subunit, ATPase 3	Protein degradation	2
nedd4b	Neural precursor cell expressed, developmentally down-regulated 4	Protein degradation	5.8
psmb9	proteasome subunit, beta type 9	Protein degradation	13.5
dnajc8	DnaJ (Hsp40) homolog, subfamily C, member 8	Protein folding	0.7
dnajc1	DnaJ (Hsp40) homolog, subfamily C, member 1	Protein folding	0.56
hsp105	Heat shock protein, 105kDa	Protein folding	0.3
rps25	Ribosomal protein S25	Translation	0.29
mrpl17	Mitochondrial ribosomal protein L17	Translation	0.32
rpl36	Ribosomal protein L36	Translation	0.5
rpl28	Ribosomal protein L28	Translation	0.7
Snrpa1	U2 small nuclear ribonucleoprotein polypeptide A'	Transcription	1.1
rpl10	ribosomal protein 10	Translation	1.1
nc1	nucleolin	Translation	2
D87691	eukaryotic translation termination factor 1	Translation	2.4
hnrpa1	heterogeneous nuclear ribonucleoprotein A1	Transcription	2.7
wars	Tryptophanyl-tRNA synthetase	Translation	3
wars	tryptophanyl-tRNA synthetase	Translation	3.9
gtf2a2	General transcription factor II A, 2 (12kD subunit)	Transcription	4.6
eif1a	Eukaryotic translation initiation factor 1A	Translation	5.4
cpsf3	Cleavage and polyadenylation specificity factor 3	Transcription	D
tcea3	Transcription elongation factor A (SII), 3	Transcription	D
mrp133	mitochondrial ribosomal protein L33	Translation	D
aqp9	Aquaporin 9	Transport	0.15
slc2a2	Solute carrier family 2 (facilitated glucose transporter), member 2	Transport	0.15
shbg	Sex hormone binding globulin	Transport	0.16
pr	Voltage-dependent calcium channel gamma subunit-like protein	Transport	0.16
slc10a1	Solute carrier family 10 (sodium/bile acid cotransporter family), member 1	Transport	0.2
slc10a1	Solute carrier family 10 (sodium/bile acid cotransporter family)	Transport	0.2
aqp8	aquaporin 8	Transport	0.24
acatn	Acetyl-Coenzyme A transporter	Transport	0.26
vdac2	Voltage-dependent anion channel 2	Transport	0.3
npc1	Niemann Pick type C1	Transport	0.35
pgy2	P glycoprotein 2	Transport	0.4
slc16a2	solute carrier family 16 (monocarboxylic acid transporters), member 2	Transport	0.4
slc25a20	Solute carrier family 25 (mitochondrial carnitine/acylcarnitine transporter)	Transport	0.42
slc25a15	Solute carrier family 25 (mitochondrial carrier; ornithine transporter)	Transport	0.45
vdac3	Voltage-dependent anion channel 3	Transport	0.5

hiat1	Hippocampus abundant gene transcript 1	Transport	0.54
atp5c1	ATP synthase, H ⁺ transporting, mitochondrial F1 complex	Transport	0.56
hbb-b1	Hemoglobin	Transport	0.65
atp6a1	ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump)	Transport	1.5
atp1b3	Na ⁺ ,K ⁺ -ATPase beta 3 subunit	Transport	2
cp	ceruloplasmin, multi-copper oxidase	Transport	2.5
slc25a4	Solute carrier family 25 (mitochondrial carrier; adenine nucleotide	Transport	3.5
slc11a2	Solute carrier family 11 (proton-coupled divalent metal ion transp	Transport	4
clic4	Chloride intracellular channel 4 (mitochondrial)	Transport	4.2
clic4	Chloride intracellular channel 4 (mitochondrial)	Transport	4.4
slc9a3r1	solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 re	Transport	4.5
clic4	Chloride intracellular channel 4 (mitochondrial)	Transport	8.1
mvp	Major vault protein	Transport	25
slc16a7	Solute carrier family 16 (monocarboxylic acid transporters)	Transport	D
clcn3	chloride channel 3	Transport	D
rbp1	cellular retinol binding protein I (mCRBPI).	Transport	D

* D = absent after LPS treatment, present in untreated controls;

I = present after LPS treatment; absent in controls.