

**TNF\_induced\_genes, fat tissue, 4-day infusion**

Gene Names	Accession	Fold
<b>Acute Phase Protein</b>		
Haptoglobin	K01933	2.5
<b>Apoptosis</b>		
astrocytic phosphoprotein (PEA-15) (EST similar to AJ243949 and X86694)	AA894345	1.4
programmed cell death 10 (pdc10) (EST similar to)	AA848545	1.5
<b>Cell Adhesion</b>		
CD37	X53517	2.5
Cell surface glycoprotein CD44 (hyaluronate binding protein)	M61875	2.7
Gal/GalNAc-specific lectin	J05495	1.6
intercellular adhesion molecule-1	D00913	2.6
Ninjurin (nerve injury induced protein)	U72660	2.2
syntenin-1 (EST similar to AJ292243)	AA892373	1.5
Vascular cell adhesion molecule 1	X63722	3.3
<b>Cell Signaling</b>		
A2 adenosine receptor	S47609	1.5
allograft inflammatory factor-1	U17919	1.6
beta-arrestin2	M91590	3.3
bone marrow stromal cell antigen 1 (BST-1)	D49955	2
C5a anaphylatoxin receptor	X95990	2.5
C5a receptor	AB003042	3
casein kinase I delta	L07578	1.8
coronin-1 (EST similar to AF143955)	AA892506	2.7
coronin-like protein	AJ006064	1.9
dual specificity phosphatase (MAP kinase phosphatase)	X94185	2.1
Epithelial membrane protein 1	Z54212	3
FGR	X57018	2.1
G protein-coupled P2 receptor	D63665	1.7
Grb2 (similar to D85748 and rat ash mRNA_X62853)	AI170776	2.2
GTPase Rab8b (Rab8b)	U53475	1.5
guanine nucleotide dissociation stimulator for a ras-related GTPase	L07925	1.5
intracellular calcium-binding protein (MRP14)	L18948	5.6
Janus protein tyrosine kinase 1, JAK1.	AJ000556	1.4
Lnk1	AA943555	1.4
tyrosine protein kinases p56-lck (EST similar to X03533)	AA800684	1.6
MAP kinase kinase	L04485	1.6
megakaryocyte hck (hemopoietic cell kinase, hck) tyrosine kinase	S74141	3.8
Murine leukemia viral (v-raf-1) oncogene homolog 1 (3611-MSV)	M15427	1.5
N-ras gene for p21 protein	X68394	1.5
P2u receptor protein	U56839	1.9
P2x4 ATP receptor	U47031	2.3
p38 mitogen activated protein kinase	AA924542	1.4
phosphodiesterase I	D28560	1.4
platelet-activating factor receptor (PAF receptor)	U04740	1.4
Platelet-derived growth factor receptor alpha	AI232379	1.4

pleckstrin (Plek) (EST similar to NM_019549)	AA799323	1.7
protein kinase (MUK)	D49785	1.9
protein kinase C delta	M18330	2.4
protein tyrosine phosphatase 20 (PTP20)	U69673	1.4
protein tyrosine phosphatase D30	U28938	2.1
rab GDI beta	X74401	1.9
RAB12, member RAS oncogene family	M83676	1.7
RAB8	M83675	1.4
RAC protein kinase beta	D30041	1.6
Rap1B (EST similar to U07795)	AA944856	1.7
ras-related protein p23	X12535	2
ras-related rab1B protein	X13905	1.8
RGS (regulator of G-protein signaling) (EST similar to AB042807)	AI639103	1.7
RhoA	D84477	1.8
S6 protein kinase (Rsk-1)	M99169	2
sorcin (EST similar to XM004593)	AA892921	1.8
Spleen tyrosine kinase (Syk)	U21683	1.8
src-like adaptor protein (EST similar to mouse AJ131777)	AI639338	2.4
<b>Cell Stress</b>		
superoxide dismutase ( manganese-containing, MnSoD)	Y00497	2.5
<b>Cell Structure and Cytoskeleton</b>		
capping protein (actin filament) (EST similar to NM007599)	AA894004	1.5
class I beta-tubulin	AA860030	1.4
cytoplasmic beta-actin	AI070848	1.5
meosin (membrane-organizing extension spike protein)	AF004811	1.4
myosin I heavy chain	X74800	1.4
Myosin, heavy polypeptide 3, skeletal muscle, embryonic	X04267	1.5
Myosin, heavy polypeptide 9, non-muscle	U31463	1.5
nonmuscle myosin heavy chain-A	U15764	1.5
p41-Arc	AF083269	1.7
slow-twitch alpha tropomyosin/hTMnm homolog	AA859305	2.1
Tropomyocin 4	J02780	1.8
<b>Collagenase</b>		
gelatinase B (GelB, MMP9)	U24441	2.4
<b>Cytokine, Chemokine and Their Receptors</b>		
betaglycan (type III TGF-beta receptor)	M77809	1.5
CXC chemokine LIX	U90448	1.7
CXC chemokine receptor (CXCR4)	U90610	2.5
glycoprotein 55.	X99337	1.6
interferon gamma receptor mRNA, partial cds.	U68272	3.8
interleukin-1 beta-converting enzyme (ICE, caspase 1)	S79676	1.6
interleukin-1 receptor type 2	Z22812	1.8
interleukin-3 receptor beta-subunit	S79263	1.6
monocyte chemoattractant cytokine (EST similar to mouse S37648)	AI009658	3.7
Osteoprotegerin	U94330	2.1
small inducible cytokine subfamily B, member 13 (EST similar to NM_018866)	AA892854	7.6

TNF-alpha converting enzyme (TACE)	AJ012603	2.4
transforming growth factor-beta 1.	X52498	2.5
<b>DNA Synthesis</b>		
CDC47 (EST similar to D26091)	AA858636	1.4
<b>Immune Response</b>		
anti-idiotypic immunoglobulin M light chain gene	U75411	1.4
C1q, c polypeptide (EST similar to NM_007574)	AA891576	1.4
CD14 (monocyte differentiation antigen )	AF087944	4
CD38 antigen (ADP-ribosyl cyclase / cyclic ADP-ribose hydrolase)	D29646	3.1
CD4 antigen (p55)	M15768	3.2
class III Fc-gamma receptor	M32062	3.5
complement C1q C chain (similar to NM007574, X66295)	AA891576	1.9
complement component C3	M29866	1.6
complement component factor B (EST similar to BC005451)	AI639117	1.6
complement protein C1q beta chain	X71127	1.8
cyclase-associated protein homologue (MCH1)	L11930	2.8
DORA protein.	AJ223184	3.7
Fc gamma receptor.	X73371	3.3
Ig heavy chain VDJ-region CH1-CH2.	X68782	1.5
Lectin, galactose binding, soluble 9 (Galectin-9)	U72741	1.8
leukocyte antigen MRC-OX44	M57276	3
leukocyte common antigen (L-CA)	M10072	1.6
Lysozyme	AA892775	2.4
MHC class I antigen gene (RT1-u haplotype)	M64795	1.8
MHC class Ib antigen (RT1.CI)	AF025308	1.6
MHC class II A-beta RT1.B-b-beta gene	M36151	6.1
MHC class II antigen RT1.B-1 beta-chain.	X56596	2.8
MHC class II RT1.u-D-alpha chain	M15562	2.1
MHC class II-associated invariant chain.	X14254	3.6
MHC class II-like alpha chain (RT1.DMa) mRNA, partial cds.	U31598	2.8
MHC class II-like beta chain (RT1.DMb)	U31599	5.9
MHC RT1-B region class II (Ia antigen) A-alpha glycoprotein	K02815	2.6
MHC-associated invariant chain gamma	X13044	1.8
pre-pro-complement C3	X52477	7.6
properdin (EST identical to X12905, complement component)	AI639534	2
Rat MHC class II RT1.B-alpha chain gene, exon 2, 3 and 4, clone lambda 7.	X07551	4.4
RT1.D beta chain.	X53054	4.8
RT1.Ma.	Z49761	3.5
RT1.Mb	AI171966	2.2
T-cell receptor active beta-chain C-region	M18854	1.4
<b>Inflammatory Response</b>		
five-lipoxygenase activating protein (FLAP)	X52196	1.9
leukotriene A4 hydrolase	S87522	1.5
phospholipase A2 precursor	X51529	1.7
<b>Lysosomal Membrane Protein</b>		
lysosomal acid phosphatase 2 (Acp2) (EST similar to NM_016988)	AI234950	1.7

vacuole membrane protein 1 (EST similar to AF411216)	AA859954	1.7
<b>Metabolism (Amino Acid and Protein)</b>		
catechol-O-methyltransferase	M93257	1.8
cytosolic branch chain aminotransferase	U35774	2.8
iodothyronine 5'-monodeiodinase (5'-MD)	M21476	2.3
N-terminal asparagine amidohydrolase (Ntan1) (EST similar to U57692)	AA894101	1.5
<b>Metabolism (Fatty acid and Lipid)</b>		
acyl-CoA hydrolase	Y09332	1.6
adipose differentiation-related protein (ADRP) (EST similar to L09734)	AA893280	1.7
Apolipoprotein B editing protein	L07114	2.2
apolipoprotein E	S76779	1.6
carnitine octanoyltransferase mRNA (COT)	J02844	1.6
fatty acid translocase/CD36, EST similar to AF 072411	AA799326	2.9
fatty acid transporter	AB005743	2.3
GM2 activator protein.	E12286	2.6
lysosomal acid lipase (intracellular hydrolase)	S81497	2.2
palmitoyl-protein thioesterase	L34262	1.8
uncoupling protein 2	AB005143	1.5
<b>Metabolism (Glucose)</b>		
aldolase A	U20643	4.8
Enolase 1, alpha	X02610	1.5
glycogen phosphorylase	X04069	1.7
glycogenin	L01793	2
N-glycan alpha 2,8-sialyltransferase (EST similar to X86000)	AA893663	1.5
pyruvate dehydrogenase E1 alpha form 1 subunit	Z12158	1.8
transaldolase (EST similar to AF069306)	AA799452	1.5
transketolase	AI059508	1.9
<b>Metabolism (Nucleotide)</b>		
5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase	D89514	2.4
ADP-ribosylarginine hydrolase	M86341	1.8
ADP-ribosyltransferase (NAD+; poly (ADP-ribose) polymerase)	U94340	2
GTP cyclohydrolase I (EST similar to M58364)	AA859496	1.5
<b>Metabolism (Other)</b>		
acid ceramidase (EST similar to NM_019734)	AA800062	1.4
ceruloplasmin	L33869	2.6
Heme oxygenase	J02722	2.8
heparan sulfate 6-sulfotransferase-1 (EST similar to AB024566)	AA859740	1.6
UDP-glucuronosyltransferase (3-methylcholanthrene-inducible )	S56937	2.4
<b>Mitochondrial Function</b>		
cytochrome b558 alpha-subunit	U18729	2.9
Cytochrome P450 1b1	U09540	3.1
cytochrome P450 Cyp7b1	U36992	7.3
<b>mRNA processing</b>		
major vault protein	U09870	1.7
polypyrimidine tract binding protein	X74565	1.9
<b>Nuclear Import/Export Protein</b>		

glycoprotein p62	M62992	1.4
<b>Nuclear Import/Export Protein</b>		
histone H3.3 (X73683) (EST similar to)	AI177503	1.5
nucleolar phosphoprotein of 140kD, Nopp140	AA892919	1.7
<b>Peptide Hormone Production</b>		
endothelin-converting enzyme	AA956930	1.5
<b>Protein Degradation</b>		
cathepsin C.	D90404	3.9
cathepsin S	L03201	1.6
Cystatin beta	AI008888	1.5
preprocathepsin D (EC 3.4.23.5)	AI235585	2
Zn-peptidase aminopeptidase N	M25073	1.6
<b>Protein Synthesis</b>		
EF-2	AA892801	2
PHAS-I (4E-BP-1)	U05014	1.4
<b>Proteoglycan</b>		
biglycan	AA859830	2.4
ryudocan (heparan sulfate proteoglycan core protein)	S61868	1.9
<b>Secreted Protein</b>		
alpha-2 type I collagen (EST similar to K01832)	AA866454	1.7
fibronectin (fn-1)	U82612	7.3
lysyl oxidase	AI234060	2.2
sulfated glycoprotein-1	S81353	2
tenascin	U09361	6
<b>Transcription Regulation</b>		
early development regulator 2 (homolog of polyhomeotic 2) (EST similar to)	AA859952	1.6
estrogen-responsive uterine mRNA, partial sequence; full lenth=U53184	AI237535	2.3
hypoxia-inducible factor 1 (HIF-1)	Y09507	1.6
J kappa recombination signal sequence binding protein (EST similar to mouse_S63	AA894312	2.3
nuclear factor kappa B p105 subunit	L26267	2
signal transducer and activator of transcription 6 (stat6)	AF055292	1.7
thyrotroph embryonic factor=leucine zipper transcription factor (TEF)	S58745	1.6
TRAP-complex gamma subunit	Z14030	1.9
<b>Transport (Ion and Small Molecules)</b>		
ATPase, Na+K+ transporting, alpha 1 polypeptide	M74494	2.1
brain sodium channel III	Y00766	1.7
chloride channels (CIC-K2L and CIC-K2S)	D26111	1.7
gamma subunit of sodium potassium ATPase	X70062	3.2
intercellular calcium-binding protein (MRP8)	AA957003	4.5
lysosomal H+ ATPase, vacuolar proton pump (EST similar to)	AA893217	1.6
monocarboxylate transporter (MCT3)	U87627	1.8
potassium channel beta 2 subunit (EST similar to U31908)	H33656	1.8
vacuolar adenosine triphosphatase subunit B.	Y12635	2.2
<b>Vesicle Coating Protein</b>		
beta-chain clathrin associated protein complex AP-1	AI028975	1.7
caveolin.	Z46614	2.3

clathrin-associated protein 17 (AP17)	U75917	1.7
<b>vesicle Transport (Including Endocytosis and Exocytosis)</b>		
Annexin A4 (EST similar to)	AI171167	1.8
clathrin assembly protein short form (CALM)	AF041373	2.4
EF-hand Ca <sup>2+</sup> -binding protein p22	U39875	1.6
Myristoylated alanine-rich protein kinase C substrate	AA955167	1.7
syntaxin binding protein 1 (EST similar to NM009295)	AI102079	1.4
VAMP5	AF054826	1.7
<b>Other</b>		
amyloid precursor-like protein 2	X77934	1.8
Nclone10 mRNA.	U31866	2.1