

**Table 3. Genes bound by NF- $\kappa$ B in U937 cells**

EntrezGene symbol	Description	+ LPS				- LPS				Known targets
		p65	c-Rel	RelB	p50	p65	c-Rel	RelB	p50	
ABHD8	hypothetical protein FLJ11743				+					
ACTR3	ARP3 actin-related protein 3 homolog				+					
AF093680	similar to mouse Glt3				+					
AF15Q14	AF15q14 protein				+					
AIM2	absent in melanoma 2				+				+	
ALAS1	aminolevulinate, delta-, synthase 1				+				+	
AP1S2	adaptor-related protein complex 1				+				+	
APBB1IP	similar to proline-rich protein 48				+				+	
APG-1	heat shock protein (hsp110 family)				+				+	
AQP9	aquaporin 9				+				+	
ARF3	ADP-ribosylation factor 3				+				+	
ARHGAP4	Rho GTPase activating protein 4				+				+	
ARHGEF2	rho/rac guanine nucleotide exchange factor				+				+	
ARL1	ADP-ribosylation factor-like 1				+				+	
ARL6IP5	vitamin A responsive; cytoskeleton related				+				+	
ARTS-1	type 1 TNFR shedding aminopeptidase regulator				+				+	
ASGR2	asialoglycoprotein receptor 2				+				+	
ASH1	hypothetical protein ASH1				+				+	
ATF6	activating transcription factor 6				+				+	
ATP5G1	ATP synthase, H+ transporting				+				+	
BAT3	HLA-B associated transcript 3				+				+	
BAZ1B	bromodomain adjacent to zinc finger domain, 1B				+				+	
BCL2A1	BCL2-related protein A1				+				+	
BCL6	B-cell CLL/lymphoma 6 (zinc finger protein 51)				+				+	
BF	B-factor, properdin				+				+	
BNIP1	BCL2/adenovirus E1B 19kD interacting protein 1				+				+	
BPI	bactericidal/permeability-increasing protein				+				+	
C10orf117	AD24 protein				+				+	
C11orf10	chromosome 11 open reading frame 10				+				+	
C14orf111	CGI-35 protein				+				+	
C20orf28	chromosome 20 open reading frame 28				+				+	
C21orf45	chromosome 21 open reading frame 45				+				+	
C21orf59	chromosome 21 open reading frame 59				+				+	
C3	complement component 3				+				+	
C6orf109	DKFZP566C243 protein				+				+	
C6orf66	HSPC125 protein				+				+	
C7orf10	chromosome 7 open reading frame 10				+				+	
C9orf100	hypothetical protein FLJ14642				+				+	
CA11	carbonic anhydrase XI				+				+	
CAPZA1	capping protein (actin filament) muscle Z-line				+				+	
CARD15	caspase recruitment domain family, member 15				+				+	
CAT	catalase				+				+	
CCDC2	capillary morphogenesis protein 1				+				+	
CCL1	small inducible cytokine A1, I-309				+				+	
CCL3	small inducible cytokine A3, Mip-1-alpha				+				+	
CCL4	small inducible cytokine A4, Mip-1-beta				+				+	
CCL5	small inducible cytokine A5 (RANTES)				+				+	
CCNL1	cyclin L ania-6a				+				+	
CCR1	chemokine (C-C motif) receptor 1				+				+	
CCRL2	chemokine (C-C motif) receptor-like 2				+				+	
CD37	CD37 antigen				+				+	
CD58	CD58 antigen, (LFA 3)				+				+	
CD69	CD69 antigen (p60, early T-cell activation antigen)				+				+	
CDCA1	cell division cycle associated 1				+				+	
CDH15	cadherin 15, M-cadherin (myotubule)				+				+	
CDKN1A	cyclin-dependent kinase inhibitor 1A (p21, Cip1)				+				+	
CHI3L2	chitinase 3-like 2				+				+	
CLCN1	chloride channel 1, skeletal muscle (Thomsen disease)				+				+	
CLECSF14	macrophage lectin 2 (calcium dependent)				+				+	
COX4I1	cytochrome c oxidase subunit IV isoform 1				+				+	
CREB1	cAMP responsive element binding protein 1				+				+	
CRYBA1	crystallin, beta A1				+				+	
CSF2	colony stimulating factor 2 (granulocyte-macrophage)				+				+	
CSF3	colony stimulating factor 3 (granulocyte)				+				+	
CST7	cystatin F (leukocystatin)				+				+	
CTSC	cathepsin C				+				+	
CYB5	cytochrome b-5				+				+	
CYP51A1	cytochrome P450, 51 (lanosterol 14-alpha-demethylase)				+				+	
DAF	decay accelerating factor for complement				+				+	
DBI	diazepam binding inhibitor (GABA receptor modulator)				+				+	
DBP	D site of albumin promoter binding protein				+				+	
DDX21	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 21				+				+	
DDX31	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 31				+				+	
DDX47	hqp0256 protein				+				+	
DGCR6L	DiGeorge syndrome critical region gene 6 like				+				+	
DGUOK	deoxyguanosine kinase				+				+	
DJ434O14.3	hypothetical protein dJ434O14.3				+				+	
DKFZp434K1210	hypothetical protein DKFZp434K1210				+				+	
DKFZp762L0311	hypothetical protein DKFZp762L0311				+				+	

Entrez Gene symbol	Description	+ LPS				- LPS				Known targets
		c-Rel		p52		c-Rel		p52		
		p65	RelB	p50	p52	p65	RelB	p50	p52	
DMAP1	DNA methyltransferase 1-associated protein 1	w		+				+		
DPP3	dipeptidylpeptidase III			w				+		
DR1	down-regulator of transcription 1, TBP-binding			+				+		
DXS9879E	DNA segment on chromosome X, expressed sequence			+				+		
EFEMP2	EGF-containing fibulin-like extracellular matrix protein 2			w				+		
EFNB1	ephrin-B1			+				+		
EIF2S3	eukaryotic translation initiation factor 2, subunit 3	w	+	+	+			+	+	
ELF3	E74-like factor 3 (ets domain transcription factor)			+						X
ELK1	ELK1, member of ETS oncogene family		+							
EMP3	epithelial membrane protein 3	+	+	+	+					
ERBB2IP	erbB2 interacting protein	+	+	+	w					
ERCC1	excision repair cross-complementing repair deficiency			+						
ET	hypothetical protein ET			w				+		
EXTL2	exostosins (multiple)-like 2			+				+		
FBXW3	F-box and WD-40 domain protein 3	+								X
FCAR	Fc fragment of IgA, receptor for	+	+	+				+		
FEN1	flap structure-specific endonuclease 1				+	+		+	+	
FHL3	four and a half LIM domains 3			+	+	w		+	w	
FIBP	fibroblast growth factor (acidic) intracellular binding protein			+				+		
FKSG87	FKSG87 protein	+	+	+						
FLJ10420	hypothetical protein FLJ10420	+	+	+	+	w				
FLJ10687	hypothetical protein FLJ10687		+							
FLJ11082	hypothetical protein FLJ11082	+								
FLJ11773	hypothetical protein FLJ11773		+		+			+		
FLJ11838	hypothetical protein FLJ11838				+			+		
FLJ13195	hypothetical protein FLJ13195 similar to stromal antigen 3				+			+		
FLJ13639	hypothetical protein FLJ13639			w	+	w				
FLJ20080	hypothetical protein FLJ20080	+	+	+				+		
FLJ20257	hypothetical protein FLJ20257			+	w					
FLJ20477	hypothetical protein FLJ20477	+	+	+	+	+		+	+	
FLJ20825	hypothetical protein FLJ20825	+								
FLJ22353	hypothetical protein FLJ22353	+						w		
FLJ22555	hypothetical protein FLJ22555	+	+	+	+			w		
FLJ22573	hypothetical protein FLJ22573	w	+	+	+					
FLOT1	flotillin 1	+	+	+	+	+		w	+	+
FUT4	fucosyltransferase 4 (alpha (1,3) fucosyltransferase)		+	w						
GABPB2	GA binding protein transcription factor, beta subunit 2	+	w	+	+	w		+		
GADD45B	growth arrest and DNA-damage-inducible, beta	+	+	+	+	+		+	+	X
GDF5	growth differentiation factor 5	+								
GNA15	guanine nucleotide binding protein (G protein), alpha 15							+		
GNG5	guanine nucleotide binding protein (G protein), gamma 5	w	+							
GNL1	guanine nucleotide binding protein-like 1			w				+		
GPR132	G protein-coupled receptor	+	+	+	+	w	w			
GPR84	G protein-coupled receptor 84	+	+	w	w					
GPX1	glutathione peroxidase 1	+	+	+	+	+		w	+	
GTF3C4	general transcription factor IIIC, polypeptide 4 (90kD)			+				+		
GTPBP4	G protein-binding protein CRFG		+							
GYPC	glycophorin C (Gerbich blood group)	+	+	+	+	+		+		
HADHA	hydroxyacyl-Coenzyme A dehydrogenase		+	w						
HCST	DNAX-activation protein 10	+	w	+	w					
HIST1H4I	H4 histone family, member M		+	+	+					
HIST1H4K	H4 histone family, member D		+	+	w					
HLA-B	major histocompatibility complex, class I, B	w	w	+	+			+	+	X
HLA-F	major histocompatibility complex, class I, F			+				+		X
HLA-G	HLA-G histocompatibility antigen, class I, G							+		
HMGN4	high-mobility group protein 17-like 3	+	w							
HNMT	histamine N-methyltransferase	w		+						
HOXA7	homeo box A7	w		w				+		
HSPA1B	heat shock 70kD protein 1B	+								
HSPC003	HSPC003 protein			+				+		
HSPC052	HSPC052 protein	+								
HSPC073	HSPC073 protein	+	+	+	w					
HSPCB	heat shock 90kD protein 1, beta	+	+	+	+			+		
ICAM1	intercellular adhesion molecule 1 (CD54)	+	+	+	+	+		w		X
ICAM4	intercellular adhesion molecule 4		+	+						
IER3	immediate early response 3	+	+	w						X
IFNGR1	interferon gamma receptor 1	+	+	+						
IL1B	interleukin 1, beta	+	+	+						X
IL1F9	interleukin-1 homolog 1	+	+	+	+					
IL2RG	interleukin 2 receptor, gamma	+	+	+	+	+		+	w	+
IL6ST	interleukin 6 signal transducer (gp130)		+	w						
IL8	interleukin 8	+	+	+	w					X
ILK	integrin-linked kinase			w				+		
INHBE	hypothetical protein MGC4638		w	+						
ITGA5	integrin, alpha 5 (fibronectin receptor)		+	+	w			+		X
ITGAX	integrin, alpha X, alpha polypeptide)	+	+	+	+			w		
ITSN2	intersectin 2		+	+						
IVNS1ABP	NS1-binding protein							+		
JUN	v-jun sarcoma virus 17 oncogene homolog (avian)		+	w						

EntrezGene symbol	Description	+ LPS				- LPS				Known targets		
		p65	c-Rel	RelB	p50	p52	p65	c-Rel	RelB		p50	p52
KIAA0186	KIAA0186 gene product			+								
KIAA0218	KIAA0218 gene product				+	w			+			
KIAA0319	KIAA0319 gene product				+				w			
KIAA0409	KIAA0409 protein				+				+	+		
KIAA0669	KIAA0669 gene product				+				w			
KIAA1008	mitotic control protein dis3 homolog				+				w			
KIAA1056	KIAA1056 protein				+	+						
KLF15	Kruppel-like factor 15	+										
LGALS1	lectin, galactoside-binding, soluble, 1 (galectin 1)				+				+			
LIM2	lens intrinsic membrane protein 2 (19kD)				+							
LIMK1	LIM domain kinase 1				+				+			
LIPT1	lipoyltransferase				+	+	+		+	+		
LMNA	lamin A/C				w	+			+			
LOC113201	hypothetical protein BC012124	+										
LOC116211	hypothetical protein BC013113	+	+	w								
LOC51015	CGI-111 protein				+				w			
LOC51321	hypothetical protein			w	w	+			+			
LOC55580	hypothetical protein			+								
LOC92106	hypothetical protein BC008322				+				+			
LRRC19	leucine rich repeat containing 19	+	+	+					+			
LRSAM1	leucine rich repeat and sterile alpha motif containing 1	+										
M96	putative DNA binding protein	+										
MAN2B1	mannosidase, alpha, class 2B, member 1	+	+	+	+				w			
MAPK6	mitogen-activated protein kinase 6	+	+									
MASTL	hypothetical protein FLJ14813				+	+	+		+	+	+	
MCCC2	methylcrotonoyl-Coenzyme A carboxylase 2 (beta)				+				+			
MCP	membrane cofactor protein (CD46)	+										
MDH1	malate dehydrogenase 1, NAD (soluble)		w	w	+				w			
MEF2B	MADS box transcription factor 2, polypeptide B	w	+	w	w							
MGC10960	hypothetical protein MGC10960	w	+									
MGC10966	hypothetical protein MGC10966		w	+	+	+						
MGC14141	hypothetical protein MGC14141				+				+			
MGC4677	hypothetical protein MGC4677	+	+	+	w							
MGC4771	hypothetical protein MGC4771				+	+	+		+	+		
MGC5242	hypothetical protein MGC5242				+	+			+			
MID1IP1	hypothetical protein STRAIT11499	+	+	w				w	w			
MLLT10	myeloid/lymphoid leukemia translocated to 10			+								
MMAB	hypothetical protein MGC20496			+					+			
MMP19	matrix metalloproteinase 19			+	+	w			+			
MMP8	matrix metalloproteinase 8 (neutrophil collagenase)			+								
MMP9	matrix metalloproteinase 9 (gelatinase B, 92kD gelatinase)	+	+	+					+	+		X
MRPL30	mitochondrial ribosomal protein L30	+	+	+					+			
MRPL34	mitochondrial ribosomal protein L34			+					+			
MRPS7	mitochondrial ribosomal protein S7			+	+				+			
MX2	myxovirus (influenza virus) resistance 2 (mouse)		+									
NAG73	NPC-related protein NAG73	+	+					+				
NAP1L1	nucleosome assembly protein 1-like 1			+								
NAPA	N-ethylmaleimide-sensitive factor attachment protein, alpha			+					+			
NCR1	lymphocyte antigen 94 homolog, NK-p46, (mouse)			+								
NFATC2	nuclear factor of activated T-cells, calcineurin-dependent 2			+					+			
NFKB2	NF-κB p52/p100	+	+	+	+	+			+	+	+	X
NFKBIB	NF-κB inhibitor, beta	+	w	+	+			w	+			
NGK7	natural killer cell group 7 sequence			+	w							
NME1	non-metastatic cells 1, protein (NM23A) expressed in			+								
NOLC1	nucleolar and coiled-body phosphprotein 1			+	w							
NOVA1	neuro-oncological ventral antigen 1							+		+		
NR1D1	nuclear receptor subfamily 1, group D, member 1			w	+				+			
NRAS	neuroblastoma RAS viral (v-ras) oncogene homolog		w	+								
NRXN3	neurexin 3			+								
NUP107	nuclear pore complex protein				+	w						
OAS3	2'-5'-oligoadenylate synthetase 3 (100 kD)	+	+	+	+				+			X
OAZ1	ornithine decarboxylase antizyme 1		+						+			
OAZ2	ornithine decarboxylase antizyme 2	+										
ORMDL1	hypothetical protein			+					+			
P4HA1	procollagen-proline, 2-oxoglutarate 4-dioxygenase alpha	+	w	+	+	+			+	+		
PAFAH2	platelet-activating factor acetylhydrolase 2 (40kD)			w	+				w			
PAK4	p21(CDKN1A)-activated kinase 4			w	+				+			
PALM	paralemmin			+					+			
PDE6D	phosphodiesterase 6D, cGMP-specific, rod, delta			+	w				+			
PEX13	peroxisome biogenesis factor 13	+		w	+							
PHLDA1	pleckstrin homology-like domain, family A, member 1			+	w							
PILRA	paired immunoglobulin-like receptor alpha	+	+	w								
PILRB	paired immunoglobulin-like receptor beta	w	+	w					w			
PKM2	pyruvate kinase, muscle	+		w					+			
PLK1	polo-like kinase (Drosophila)			+					+			
PLXNB1	plexin B1	+						+				
PMAIP1	phorbol-12-myristate-13-acetate-induced protein 1		+	+	+				+			
PMS1	PMS1 postmeiotic segregation increased 1 (S. cerevisiae)			+								
PMS2L8	postmeiotic segregation increased 2-like 8			+								

EntrezGene symbol	Description	+ LPS				- LPS				Known targets
		p65	c-Rel	RelB	p50	p65	c-Rel	RelB	p50	
POLB	polymerase (DNA directed), beta			+				+		
POLD4	polymerase (DNA-directed), delta 4	w		+						
POLR1C	RNA polymerase I subunit				+	+		+		
POLR2A	polymerase (RNA) II (DNA directed) polypeptide A				+			+		
POLR3E	hypothetical protein FLJ10509	+	+	+	w					
PPFIBP1	PTPRF interacting protein, binding protein 1				+			w		
PPP1R15B	protein phosphatase 1, regulatory subunit 15B	+	+	+	+	w		w		
PPP1R3B	protein phosphatase 1, regulatory subunit 3B				+			+		
PPP5C	protein phosphatase 5, catalytic subunit				+			+	w	
PRDM1	PR domain containing 1, with ZNF domain				+			+		
PRDM11	PR domain containing 11	w	+				w			
PRDM8	PR domain containing 8				+	w		+	+	
PRKAB2	protein kinase, AMP-activated, beta 2 subunit				w	+	+			
PTGS2	prostaglandin-endoperoxide synthase 2, COX-2				+	+		w	X	
PTPN7	protein tyrosine phosphatase, non-receptor type 7	w			+	w		+		
PTX3	pentaxin-related gene, rapidly induced by IL-1 beta					w		+	X	
PXMP3	peroxisomal membrane protein 3 (Zellweger syndrome)	+								
QTRTD1	hypothetical protein FLJ12960			+						
RAB7L1	RAB7, member RAS oncogene family-like 1			+						
RABL2A	RAB, member of RAS oncogene family-like 2A			+						
RABL2B	RAB, member of RAS oncogene family-like 2B			+					X	
RAC2	ras-related C3 botulinum toxin substrate 2 (rho family)	w		+					X	
RB1	retinoblastoma 1 (including osteosarcoma)	+		+						
RB1CC1	RB1-inducible coiled-coil 1			+				w		
RBBP4	retinoblastoma binding protein 4			+						
RFP	ret finger protein	+								
RFXANK	regulatory factor X-associated ankyrin-containing protein		+							
RGC32	RGC32 protein	+								
RGL1	RalGDS-like gene				+					
RND1	GTP-binding protein				+	w				
RNF4	ring finger protein 4				+			w		
RPL27A	ribosomal protein L27a	+					+			
RPL39	ribosomal protein L39	+								
RPL39L	ribosomal protein L39-like				+			+		
RPS28	ribosomal protein S28				+					
RPS8	ribosomal protein S8	+								
RS1	retinosischisis (X-linked, juvenile) 1		+							
S100A12	S100 calcium binding protein A12 (calgranulin C)	+	+	+	w					
S100A3	S100 calcium binding protein A3	w	+	+	w					
S100A4	S100 calcium binding protein A4 (calvasculin)	+		+	+			w		
S100A9	S100 calcium binding protein A9 (calgranulin B)	+	+	w						
S100Z	S100Z protein	+								
SAS	sarcoma amplified sequence			+	w					
SCARB1	CD36 antigen (thrombospondin receptor)-like 1			+					X	
SDF2L1	stromal cell-derived factor 2-like 1	+					w			
SELPLG	selectin P ligand	+	+				+		X	
SEMA7A	sema domain, immunoglobulin domain, semaphorin 7A							+		
SEPW1	selenoprotein W, 1	+								
SERPINB2	serine (or cysteine) proteinase inhibitor, clade B	+								
SERPINE1	serine (or cysteine) proteinase inhibitor, clade E	w	+						X	
SFRS2	splicing factor, arginine/serine-rich 2			+				+		
SIRT2	sirtuin silent mating type information regulation 2			+				+		
SLAMF8	B lymphocyte activator macrophage expressed	+	+	w			+			
SLC1A3	solute carrier family 1 (glutamate transporter), member 3			w	+	+		+	+	
SLC25A12	solute carrier family 25, member 12	+	+	+	w					
SLC30A7	zinc transporter like 2			+	+			+		
SLC39A6	LIV-1 protein, estrogen regulated	+	w	w	+	w		+	+	
SLC7A1	solute carrier family 7, member 1	+					+			
SMPD1	sphingomyelin phosphodiesterase 1, acid lysosomal	+	+	+	+		+	+	+	
SOX8	SRY (sex determining region Y)-box 8			w				+		
SPATA2	spermatogenesis associated 2			+						
SQSTM1	sequestosome 1							+		
SREBF2	sterol regulatory element binding transcription factor 2			+	+					
SRF	serum response factor			+				+	X	
SSSCA1	Sjogren's syndrome/scleroderma autoantigen 1			+	w					
STARD10	serologically defined colon cancer antigen 28			+	w					
STAT1	signal transducer and activator of transcription 1		+	+	w	w		+		
STAT5A	signal transducer and activator of transcription 5A	w	+	+	+			w	X	
STAT6	signal transducer and activator of transcription 6	+			w					
STATIP1	elongator protein 2				+	+		+		
STXBP3	syntaxin binding protein 3				+			+		
SVIL	supervillin			+						
SYNPO	synaptopodin			+						
TAGLN2	transgelin 2			+						
TAPBP	TAP binding protein (tapasin)	+	+	+	+		+	+	+	
TFAP2A	transcription factor AP-2 alpha	+								
TFDP3	E2F-like protein									

EntrezGene symbol	Description	+ LPS				- LPS				Known targets		
		p65	c-Rel	RelB	p50	p52	p65	c-Rel	RelB		p50	p52
TFE3	transcription factor binding to IGHM enhancer 3			+								
TIMP1	tissue inhibitor of metalloproteinase 1	+			+	+	+					
TJP2	tight junction protein 2 (zona occludens 2)				+	+						
TLN1	talin 1				+	+				+		
TMPIT	transmembrane protein induced by tumor TNF					+	+			+	+	
TNF	tumor necrosis factor (TNF superfamily, member 2)	+	+	+	+	w	+					X
TNFRSF1A	tumor necrosis factor receptor superfamily, member 1A	+	+	w	w							
TNFSF13	tumor necrosis factor (ligand) superfamily, member 13				+	+				+	+	
TNFSF13B	tumor necrosis factor (ligand) superfamily, member 13b					w						
TNFSF14	tumor necrosis factor (ligand) superfamily, member 14			+	w							
TNIP3	hypothetical protein FLJ21162	+										
TRA1	tumor rejection antigen (gp96) 1			+	w							
TRAF1	TNF receptor-associated factor 1	+	+	+	+	+				+		X
TRAPPC3	similar to yeast BET3 (S. cerevisiae)			+	+					+	+	
TRIM31	tripartite motif-containing 31			+	+							
TRPM2	transient receptor potential cation channel, subfamily M		+	+				+				
TTC17	hypothetical protein FLJ10890				+	+				+		
UBE2H	ubiquitin-conjugating enzyme E2H		+		w							
UBE2L6	ubiquitin-conjugating enzyme E2L 6				+					+	+	
USP2	ubiquitin specific protease 2				+							
USP25	ubiquitin specific protease 25			+								
USP52	KIAA0710 gene product	+		+	w							
VAV1	vav 1 oncogene	+	w	+	+	w						
VSIG4	Ig superfamily protein	+		+	w							
WBP4	WW domain binding protein 4 (formin binding protein 21)	+	+	+	+					+		
YME1L1	YME1-like 1 (S. cerevisiae)									+		
YWHAB	tyrosine 3-monooxygenase, beta polypeptide				+					+		
ZBTB11	zinc finger protein				+					+		
ZDHHC6	hypothetical protein FLJ21952	+		w	w							
ZNF217	zinc finger protein 217			+								
ZNF221	zinc finger protein 221			+	+	+				+	+	
ZNF581	HSPC189 protein			+								
ZNF76	zinc finger protein 76 (expressed in testis)	+	+		w							
ZNHIT1	putative cyclin G1 interacting protein		+									

+, Indicates high confidence binding (p< 0.002),  
at least one subunit had to match this criterion  
w, Indicates weaker binding events (p< 0.01)