Effects of human RelA transgene on murine macrophage inflammatory responses. Papoutsopoulou S, Morris L, Bayliff A, Mair T, Stagi M, Bergey F, Alam MT, Sheibani-Tezerji R, Rosenstiel P, Müller W, Martins Dos Santos VAP, Campbell BJ.

SUPPLEMENTARY MATERIALS

Figure S2: Differentially expresssed genes identified by RNA sequencing in p65-DsRedxp/IκBα-eGFP bone marrow derived murine macrophages (BMDMs). Significant differentially expressed genes identified by RNAseq using a cut-off ≥ 1.5 and ≤ -1.5 log2 fold change (FC) in expression, between unstimulated controls and Lipid A-stimulated BMDMs (100 ng/mL, at 1, 3 and 6 h); n=101 genes across all treatment groups. Heatmap of **(A)** up-regulated genes (red), and **(B)** downregulated genes (green), in untreated and TNF-treated p65-DsRedxp/IκBβ-eGFP BMDMs relative to wild-type C57BL/6J macrophages. Genes highlighted in black boxes were identified as NFκB target genes based on database searches.

A

Untreated		1 h post Lipid A		3h post Lipid A		6h post Lipid A	
Gene	Log_2 FC	Gene	Log_2 FC	Gene	Log_2 FC	Gene	Log_2 FC
Ifi202b	12.34	*Ifi202b*	11.16	*Rprl3*	9.73	*Ifi202b*	11.67
Gm14513	10.64	*Gm14513*	10.59	*Ifi202b*	9.06	*Gm14513*	10.21
Rprl3	9.56	*Rprl3*	10.09	*Gm14513*	7.79	*Rprl3*	9.61
Mrpl48-ps	8.16	*Glns-ps1*	5.84	*Gm10020*	6.93	*Gm5806*	7.43
Rps15a-ps8	6.79	*Rpl15-ps2*	5.80	*Rpl15-ps2*	5.91	*Rps15a-ps8*	6.69
Gm9855	5.62	*Igj*	5.45	*Gm9855*	5.64	*Rpl15-ps2*	5.89
Gm10020	4.75	*Gm1840*	5.21	*Ctse*	4.99	*Gm1840*	5.02
Sncg	4.22	*Ctse*	4.52	*Glns-ps1*	4.33	*Gm9855*	4.59
Gm5806	4.21	*Epha8*	4.50	*Gm1840*	4.19	*Ctse*	4.25
Gm1840	4.02	*Eps8l1*	4.44	*Gm5806*	3.87	*Trim34b*	4.23
Amd2	3.96	*Gm18445*	4.19	*Gm8822*	3.33	*Mrpl48-ps*	3.84
Ctse	3.56	*Gm13736*	3.98	*Capn11*	2.89	*Eps8l1*	3.74
Cdkn1c	2.43	*Gm5806*	3.93	*Gm18445*	2.82	*Gm18445*	3.23
Ighm	2.00	*Gm13331*	3.53	*Mpp7*	1.98	*Gm8822*	2.46
Mmp12	1.53	*Rpl34-ps1*	3.38	*Npl*	1.86	***Ptges***	2.46
Adrbk2	1.50	*Ildr2*	3.06	***Ptges***	1.80	*U90926*	2.13
		Gm8822	2.57	*Harbi1*	1.61	*Npl*	2.08
		Gm22748	2.10	***Nptx1***	1.52	***Nptx1***	2.01
		Nptx1	2.01				
		Npl	1.98				
		Osm	1.72				
		Fos	1.53				

B

Untreated		1 h post Lipid A		3h post Lipid A		6h post Lipid A	
Gene	Log_2 FC	Gene	Log_2 FC	Gene	Log_2 FC	Gene	Log_2 FC
Aoah	-1.72	***Tagap***	-1.50	*Gm37311*	-1.52	*Klhl25*	-1.51
Mx1	-1.75	*Slamf8*	-1.52	*Apol7c*	-1.54	***Vcam1***	-1.52
Arg2	-1.82	***Pyhin1***	-1.53	***Ifi44***	-1.56	***Cd69***	-1.52
Adgb	-1.85	*Ifit2*	-1.60	*P2ry13*	-1.59	*Fam26f*	-1.65
Vcam1	-1.88	***Ifi44***	-1.61	*Vash1*	-1.59	*Cd5l*	-1.88
BC021767	-1.93	*Irg1*	-1.64	*Gbp5*	-1.59	*Gbp5*	-1.89
Il18bp	-1.94	*Hpn*	-1.72	*Tmcc3*	-1.62	*Gm1966*	-1.93
AW112010	-1.94	***Cd69***	-1.73	*Marco*	-1.64	*Slamf9*	-2.24
Gbp2	-2.05	*Il18bp*	-1.78	*Fam26f*	-1.75	***Cxcl9***	-2.28
9430092D12Rik	-2.17	***Cxcl10***	-1.83	***Sele***	-1.78	*Gm18853*	-2.44
Cd69	-2.19	*Pydc4*	-1.95	*Tnfsf9*	-1.78	*P2ry13*	-2.98
Iigp1	-2.39	*Gbp3*	-1.97	*Tex15*	-1.80	*Gm13166*	-3.48
Ifi205	-2.39	***Iigp1***	-1.99	*Gbp6*	-1.87	*Gm6969*	-4.88
Irg1	-2.57	*AW112010*	-2.06	*Treml2*	-1.88	*Haao*	-4.96
Cgn	-2.82	*Gm4955*	-2.22	*9530003O04Rik*	-1.92		
Itgad	-2.84	***Vcam1***	-2.39	***Cxcl9***	-1.99		
Col19a1	-2.86	*Gbp2*	-2.44	*Gm37694*	-2.16		
Ly6i	-2.93	*Gbp6*	-2.51	*Ly6i*	-2.24		
Cfb	-2.97	*Ifi205*	-2.85	***Ccl17***	-2.53		
Vsig4	-3.04	*Gm6969*	-3.11	*Tmprss4*	-2.66		
Il1a	-3.08	*Marco*	-3.15	*Pdzd2*	-2.68		
Marco	-3.12	*Rptoros*	-3.19	*Gm6969*	-3.00		
Cd38	-3.19	***Il12b***	-3.38	*Itgad*	-3.36		
Saa3	-4.28	***Cxcl9***	-3.39	*Dscaml1*	-3.59		
Gbp5	-4.45	*Haao*	-3.50	*Vsig4*	-4.09		
		Saa3	-4.12				
		Gbp5	-4.20				