

Upstream Regulator	Log Ratio	Molecule Type	Predicted	Activati...	Activation z-score	Notes	p-value of ov...	Target molecules in...	Mechanistic Net...
IFNG		cytokine	Activated	8.509	bias	2.20E-51	↑B2M, ↑... ...all 83	130 (16)	
IRF7		transcription regula...	Activated	6.336	bias	1.93E-49	↑BCL2L13, ↑... ...all 42	93 (10)	
IFNA2		cytokine	Activated	6.457	bias	7.31E-49	↑B2M, ↑... ...all 46	121 (17)	
IFNL1		cytokine	Activated	5.682	bias	7.91E-48	↑BST2, ↑... ...all 33	112 (13)	
MAPK1		kinase	Inhibited	-5.592		1.39E-45	↑BST2, ↑... ...all 49	125 (17)	
lipopolysaccharide		chemical drug	Activated	7.905	bias	3.03E-45	↑ABCC1, ↑... ...all 87	141 (16)	
poly rI:C-RNA		chemical reagent	Activated	6.424	bias	4.51E-45	↑B2M, ↑... ...all 52	140 (18)	
Interferon alpha		group	Activated	5.784	bias	1.84E-42	↑APOL2, ↑... ...all 47	111 (16)	
TNF		cytokine	Activated	7.755	bias	5.57E-42	↑ABCC1, ↑... ...all 82	133 (17)	
STAT3		transcription regula...	Activated	3.386	bias	3.41E-33	↑BST2, ↑... ...all 43	127 (21)	
IRF1		transcription regula...	Activated	4.674	bias	1.55E-31	↑B2M, ↑... ...all 30	127 (17)	
NKX2-3		transcription regula...	Inhibited	-5.741		6.13E-31	↑C19orf66, ↑... ...all 33		
OSM		cytokine	Activated	4.710		1.63E-28	↑ABCC1, ↑... ...all 43	113 (20)	
CD40LG		cytokine	Activated	3.683	bias	1.07E-26	↑AKAP2, ↑... ...all 37	129 (18)	
TRIM24		transcription regula...	Inhibited	-4.352		4.70E-26	↑BST2, ↑... ...all 23	66 (7)	
STAT1	↑1.000	transcription regula...	Activated	4.784	bias	7.18E-26	↑B2M, ↑... ...all 31	126 (16)	
PAF1		other	Activated	4.243	bias	3.83E-25	↑CCL5, ↑... ...all 18		
IRF3		transcription regula...	Activated	4.216	bias	2.37E-23	↑B2M, ↑... ...all 25	87 (11)	
tretinoin		chemical-endogenous	Activated	5.170		7.37E-22	↑ANXA2, ↑... ...all 56	133 (15)	
IRF5		transcription regula...	Activated	4.172	bias	1.45E-21	↑CCL5, ↑... ...all 18	70 (14)	
IL1B		cytokine	Activated	5.255	bias	1.83E-21	↑CASP4, ↑... ...all 43	118 (15)	
EIF2AK2	↑1.000	kinase	Activated	4.202	bias	2.23E-21	↑DDX58, ↑... ...all 19	87 (11)	
IFNAR1		transmembrane rec...	Activated	2.576	bias	3.51E-21	↑B2M, ↑... ...all 20	131 (17)	
IL1RN		cytokine	Inhibited	-4.522		4.63E-21	↑CTSS, ↑... ...all 21	117 (12)	
IRF2		transcription regula...	Inhibited	-2.335		5.38E-21	↑B2M, ↑... ...all 17	74 (9)	
IFNB1		cytokine	Activated	4.139	bias	1.15E-19	↑BST2, ↑... ...all 26	110 (17)	
TP53		transcription regula...		1.814		2.80E-19	↑ABCC1, ↑... ...all 50	108 (16)	
SB203580		chemical-kinase inh...	Inhibited	-4.811	bias	8.88E-19	↑BST2, ↑... ...all 28	133 (22)	
TCR		complex	Activated	2.133	bias	1.27E-18	↑CCL5, ↓... ...all 26	97 (16)	
TLR3		transmembrane rec...	Activated	3.658	bias	2.99E-18	↑CCL5, ↑... ...all 24	85 (12)	
Ifn		group	Activated	4.142	bias	8.03E-18	↑B2M, ↑... ...all 18	115 (17)	
RELA		transcription regula...	Activated	3.808	bias	1.07E-17	↑B2M, ↑... ...all 27	118 (17)	
TGM2	↑1.000	enzyme	Activated	4.785	bias	1.51E-17	↑DDX60, ↑... ...all 23		
DDX58	↑1.000	enzyme	Activated	2.953	bias	2.06E-17	↑CCL5, ↑... ...all 14	82 (14)	
IL6		cytokine	Activated	4.253	bias	3.84E-17	↑ABCC1, ↑... ...all 35	125 (24)	
MAVS		other	Activated	3.712	bias	6.89E-17	↑CCL5, ↑... ...all 14	82 (12)	
IFNLR1		transmembrane rec...				1.34E-16	↑CCL5, ↑... ...all 13	112 (13)	
TGFB1		growth factor		1.988		1.98E-16	↑AKR1C1... ...all 53	92 (19)	
IFN Beta		group	Activated	3.410	bias	4.16E-16	↑CXCL1, ↑... ...all 17	101 (16)	
TICAM1		other	Activated	4.170	bias	6.94E-16	↑CASP4, ↑... ...all 18	85 (17)	
TNFSF10		cytokine	Activated	3.208		8.27E-16	↑EIF2AK2, ↑... ...all 15	130 (21)	
PARP9	↑1.000	other	Activated	2.985	bias	5.57E-15	↑HLA-E, ↑... ...all 9		
SOCs1		other	Inhibited	-3.242		8.48E-15	↑DDX58, ↓... ...all 16	130 (20)	
camptothecin		chemical toxicant	Activated	3.391		1.03E-14	↑AKAP2, ↑... ...all 31	95 (18)	
stallimycin		chemical drug	Activated	3.416	bias	1.10E-14	↑IFI16, ↑... ...all 12	102 (11)	
IFN type 1		group	Activated	2.841	bias	1.10E-14	↑BST2, ↑... ...all 12	130 (17)	
Nfkb (complex)		complex	Activated	4.889	bias	1.16E-14	↑CASP4, ↑... ...all 30	119 (17)	
salmonellaminnesota		chemical-endogenous	Activated	3.818	bias	1.26E-14	↑CASP4, ↑... ...all 15	96 (19)	
U0126		chemical-kinase inh...	Inhibited	-2.941	bias	2.09E-14	↑ARHGEF2, ↑... ...all 27	94 (21)	
bromodeoxyuridine		chemical drug	Activated	3.416	bias	9.11E-14	↑IFI16, ↑... ...all 12	102 (11)	
STAT2		transcription regula...	Activated	2.935	bias	2.51E-13	↑GBP1, ↑... ...all 10	114 (14)	
IFNA1/IFNA13		cytokine	Activated	3.010	bias	4.37E-13	↑EIF2AK2, ↑... ...all 12	115 (17)	
JAK1		kinase	Activated	3.098	bias	1.30E-12	↑EIF2AK2, ↑... ...all 10	86 (13)	
KRAS		enzyme		-0.240		1.95E-12	↑AKR1B10, ↑... ...all 21	114 (9)	
NLRP5		transcription regula...	Activated	2.786	bias	2.29E-12	↑B2M, ↑H... ...all 8		
HRAS		enzyme	Activated	2.658	bias	2.81E-12	↑AKAP2, ↑... ...all 27	106 (16)	
SASH1		other	Activated	3.464	bias	2.95E-12	↑CMPK2, ↑... ...all 12		
SAMSN1		other	Activated	3.051	bias	3.36E-12	↑CMPK2, ↑... ...all 13		
ERBB2		kinase		0.339	bias	4.50E-12	↑ANXA2, ↑... ...all 28	92 (17)	
TLR4		transmembrane rec...	Activated	3.189	bias	4.55E-12	↑BCL10, ↑... ...all 20	94 (15)	
sirolimus		chemical drug	Inhibited	-2.309	bias	4.64E-12	↑B2M, ↑... ...all 23	100 (23)	
dexamethasone		chemical drug		-1.867		4.88E-12	↑ABCC1, ↑... ...all 45	100 (19)	
GAPDH		enzyme	Inhibited	-2.158	bias	1.20E-11	↑CXCL1, ↑... ...all 9	38 (3)	
NLRP12		other		1.456	bias	1.20E-11	↑CASP1, ↑... ...all 9	60 (7)	
IFNAR2		transmembrane rec...	Activated	2.828	bias	1.62E-11	↑HERC5, ↑... ...all 8	63 (8)	
5-O-mycetyl-beta-al		chemical-endogenous	Activated	3.422	bias	2.71E-11	↑CXCL1, ↑... ...all 21	119 (12)	
MYD88		other	Activated	3.573	bias	4.25E-11	↑BCL10, ↑... ...all 17	95 (15)	
JUN	↑1.000	transcription regula...		0.654	bias	7.14E-11	↑ANXA2, ↑... ...all 21	91 (18)	

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CHUK		kinase	Activated	3.654	bias	7.84E-11	↑CASP4, ↓...all 16	81 (13)
paclitaxel		chemical drug	Activated	2.587	bias	8.10E-11	↑ARHGEF2, ...all 18	109 (20)
epigallocatechin-gal		chemical drug	Inhibited	-2.601	bias	1.63E-10	↑CASP1, ↓...all 16	105 (18)
LY294002		chemical-kinase inh	Inhibited	-3.039	bias	1.68E-10	↑ABCC1, ↓...all 23	104 (22)
ERK1/2		group	Activated	3.482	bias	2.13E-10	↑AKR1B10, ...all 17	99 (19)
IL27		cytokine	Activated	2.811	bias	2.15E-10	↑B2M, ↑...all 12	132 (19)
beta-estradiol		chemical-endogenous		1.016	bias	2.16E-10	↑BCL10, ↓...all 43	87 (18)
decitabine		chemical drug	Activated	3.219	bias	2.26E-10	↑ABCC1, ↓...all 22	111 (15)
PD98059		chemical-kinase inh	Inhibited	-3.113	bias	2.35E-10	↑CCL5, ↑...all 24	72 (19)
hydrogen peroxide		chemical-endogenous	Activated	3.358	bias	4.60E-10	↑AKR1C1, ...all 21	106 (20)
E. coli B4 lipopolysac		chemical toxicant	Activated	2.759	bias	4.72E-10	↑CASP7, ↓...all 17	105 (19)
GF11		transcription regulator	Inhibited	-3.317	bias	4.87E-10	↑CASP1, ↓...all 11	104 (12)
3,3'-diindolylmethan		chemical drug		1.475		5.15E-10	↑HLA-A, ↓...all 9	106 (12)
NFKBIA		transcription regulator	Activated	2.635		5.48E-10	↑CASP4, ↓...all 21	95 (17)
ANGPT2		growth factor	Activated	2.909	bias	8.07E-10	↑ABCC1, ↓...all 12	101 (18)
NR3C1		ligand-dependent receptor		-1.502		9.13E-10	↓AMIGO2, ...all 25	125 (19)
DOCK8		other	Activated	3.162	bias	9.77E-10	↑CMPK2, ↓...all 10	
IL1		group	Activated	4.107	bias	1.03E-09	↑AKR1C1, ...all 18	93 (18)
phorbol myristate acetate		chemical drug	Activated	4.550	bias	1.18E-09	↑AKR1B10, ...all 31	65 (16)
2-aminopurine		chemical reagent	Inhibited	-2.605	bias	1.34E-09	↑CXCL1, ↑...all 7	37 (3)
IKBKE		kinase	Activated	3.905	bias	1.41E-09	↑CCL5, ↑...all 16	81 (13)
MAP3K7		kinase		0.736	bias	1.46E-09	↑CCL5, ↑...all 11	105 (19)
IGF1		growth factor		-0.011	bias	2.03E-09	↑AKR1C1, ...all 19	121 (22)
IRF8		transcription regulator		0.620	bias	2.06E-09	↑B2M, ↑...all 11	103 (14)
FADD		other	Activated	2.530	bias	2.59E-09	↑CASP7, ↓...all 10	74 (10)
RNA polymerase II		complex				2.72E-09	↑B2M, ↑...all 15	
TERT		enzyme				2.86E-09	↑AKAP2, ↓...all 12	50 (8)
resiquimoc		chemical drug	Activated	2.748	bias	3.19E-09	↑CASP4, ↓...all 13	90 (19)
IL4		cytokine		1.930	bias	3.79E-09	↑ANXA2, ↓...all 26	78 (17)
TAB1		enzyme	Inhibited	-2.621	bias	4.69E-09	↑CCL5, ↑CFB, ...all 7	91 (23)
PLAU	↑1.000	peptidase		1.526	bias	5.85E-09	↑CCL5, ↑...all 9	96 (19)
EBI3		cytokine	Activated	2.778	bias	6.19E-09	↑B2M, ↑H...all 8	94 (14)