

Rapid pathogen-specific recruitment of immune effector cells in the skin by secreted toxins

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Supplementary Information

Supplementary Tab. 1. Predominant early gene induction in neutrophils upon stimulation by *S. aureus* culture filtrate *

Gene name		Expression change (LAC vs. PMN control)			Expression change (LAC vs. Δ psm)		
		30 min	60 min	180 min	30 min	60 min	180 min
ACTL7A	actin-like 7A	1.0	13.4	5.5	1.4	3.2	1.3
ADAMTS5	ADAM metallopeptidase with thrombospondin type 1 motif, 5	24.8	1.8	1.7	1.3	1.4	9.1
ANGEL1	angel homolog 1 (Drosophila)	4.3	1.2	2.4	14.1	-1.8	1.6
ARSK	arylsulfatase family, member K	1.7	1.2	3.6	53.4	1.1	1.6
BRE-AS1	BRE antisense RNA 1 (non-protein coding)	11.6	26.7	20.0	9.2	13.1	7.3
C11orf96	chromosome 11 open reading frame 96	-1.2	2.0	24.5	-1.7	3.9	3.6
C15orf48	chromosome 15 open reading frame 48	1.4	17.1	38.9	-1.2	9.8	9.1
C1orf51	chromosome 1 open reading frame 51	4.0	1.8	2.6	14.7	1.1	1.7
CCL20	chemokine (C-C motif) ligand 20	4.6	54.4	38.2	2.3	30.2	94.9
CXCL2	chemokine (C-X-C motif) ligand 2	2.5	30.2	15.5	2.6	9.3	6.2
DKFZP434F142	uncharacterized DKFZp434F142	2.6	-1.1	-1.1	1.2	13.1	-1.7
DLG1	Discs, large homolog 1 (Drosophila)	1.5	22.7	-1.9	-1.0	1.6	-1.0
DNM3OS	DNM3 opposite strand/antisense RNA (non-protein coding)	1.9	2.1	37.7	-2.3	2.7	1.6
DUSP2	dual specificity phosphatase 2	4.9	18.3	20.5	4.4	6.8	3.3
EGR1	early growth response 1	191.7	122.8	7.8	272.8	223.0	14.6
EGR2	early growth response 2	9.0	11.8	6.0	11.4	9.1	3.2
EGR3	early growth response 3	5.6	7.2	6.8	10.5	7.4	7.4
EHD4	EH-domain containing 4	2.3	22.5	1.8	1.8	7.8	1.1
EIF1	eukaryotic translation initiation factor 1	5.6	15.1	2.0	5.5	10.0	2.3
EREG	epiregulin	-1.1	3.1	21.3	1.2	1.9	1.5
FANCI	Fanconi anemia, complementation group I	15.7	1.2	1.2	-1.1	1.1	2.4
FKBP4	FK506 binding protein 4, 59kDa	14.2	13.6	-4.4	1.4	6.6	1.3
FLT1	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor)	-2.9	-2.0	35.8	-2.2	-1.0	3.9
FOSB	FBJ murine osteosarcoma viral oncogene homolog B	3.7	6.1	17.2	4.5	6.0	32.2
FOSL1	FOS-like antigen 1	1.4	10.1	13.7	2.3	6.8	7.3
FUT5	fucosyltransferase 5 (alpha (1,3) fucosyltransferase)	1.6	6.6	1.1	4.1	11.4	4.1
G0S2	G0/G1switch 2	2.4	6.0	24.3	1.8	2.1	4.1
HBEGF	heparin-binding EGF-like growth factor	1.1	10.4	1.2	1.1	7.9	2.5
IL1A	interleukin 1, alpha	1.9	16.5	26.2	3.5	8.2	8.6
IL1RL2	interleukin 1 receptor-like 2	3.9	10.4	41.0	1.1	5.4	4.6
INSR	insulin receptor	-1.0	5.2	32.7	3.7	3.5	3.1
KCTD7 / RABGEF1	potassium channel tetramerisation domain containing 7 / RAB guanine nucleotide exchange factor (GEF) 1	20.0	5.9	1.2	2.8	1.0	3.4
LAMB3	laminin, beta 3	1.1	6.9	24.1	2.0	5.1	9.0
LIF	leukemia inhibitory factor	1.8	4.2	7.0	1.5	14.5	2.1
LOC100130264	uncharacterized LOC100130264	46.9	8.1	1.8	2.7	2.8	1.0
LOC100507065	uncharacterized LOC100507065	-1.2	-1.5	4.1	-1.2	-1.2	27.5
LOC100653132 [†]	uncharacterized LOC100653132	117.9	104.6	13.3	55.6	61.2	17.9
LOC441666	zinc finger protein 91 pseudogene	3.0	1.6	24.8	-1.4	9.7	2.1
MAP3K2	mitogen-activated protein kinase kinase 2	1.6	1.2	5.1	1.8	10.1	2.4
NR4A3	nuclear receptor subfamily 4, group A, member 3	3.0	11.7	2.1	5.6	5.3	2.2
OSM	oncostatin M	6.7	28.4	9.4	5.8	10.6	3.4
PEX13	peroxisomal biogenesis factor 13	3.2	-3.0	27.0	1.3	-1.6	4.6
PHLDA2	pleckstrin homology-like domain, family A, member 2	1.5	5.2	28.3	1.9	3.2	21.5
PIN4	protein (peptidylprolyl cis/trans isomerase) NIMA-interacting, 4 (parvulin)	-2.0	15.2	-1.5	-1.6	2.3	-1.5

PLEKHG2	pleckstrin homology domain containing, family G (with RhoGef domain) member 2	1.0	2.0	26.5	1.4	-1.1	3.3
PSORS1C2	psoriasis susceptibility 1 candidate 2	6.5	3.3	-1.1	10.8	3.7	2.7
SEC24A	SEC24 family, member A (S. cerevisiae)	1.7	3.3	1.7	1.3	15.0	1.6
SH2D3A	SH2 domain containing 3A	-1.1	1.5	22.9	1.4	3.5	2.2
SNORD3B-1 / SNORD3B-2 / SNORD3D	small nucleolar RNA, C/D box 3B-1 / small nucleolar RNA, C/D box 3B-2 / small nucleolar RNA, C/D box 3D	2.5	17.9	3.9	2.6	2.5	3.1
SOCS3	suppressor of cytokine signaling 3	2.1	12.6	17.0	2.5	4.2	3.6
SRSF3	Serine/arginine-rich splicing factor 3	4.2	5.1	-1.0	4.0	12.4	2.2
TDRD3	tudor domain containing 3	2.3	-1.7	27.8	-1.4	-1.4	-1.2
THAP2	THAP domain containing, apoptosis associated protein 2	3.0	9.2	6.8	1.9	12.9	5.0
TNFRSF18	tumor necrosis factor receptor superfamily, member 18	19.8	-1.2	2.0	2.5	2.0	1.2
TYSND1	Trypsin domain containing 1	2.4	-1.1	1.4	10.5	-1.2	-1.1
VILL	villin-like	1.3	-1.9	23.7	1.1	-2.0	1.6

*The table contains all annotated genes with > factor 10 up-regulation at 30 or 60 min, or > factor 20 at 180 min.

†This (pseudo)gene was withdrawn by NCBI after completion of microarray analyses, because, as stated on the NCBI website, “the model on which it was based was not predicted in a later annotation”. It is located adjacent to the EGR1 gene.