

Table S4. Differentially expressed genes involved in regulation of mucosal immune tolerance in healthy adults

Protein	Function	bacterial treatment		
		stationary- placebo	dead- placebo	midlog- placebo
BAFF	B cell activation factor from TNF family promoting Ig class switching	n.s.	n.s.	n.s.
APRIL	B cell proliferation inducing ligand promoting Ig class switching	1.11 (0.03)	n.s.	n.s.
TSLP ¹	activates and stimulates survival of immune cell types including DCs and CD4+ T cells	-	-	-
AID ¹	deaminase induced during immune responses that is involved in Ig class switching	-	-	-
SLPI	conferring protection of epithelia from attack by endogenous proteolytic enzymes during immune responses	-1.44 (0.01)	-1.23 (0.04)	n.s.
TREM1	receptor triggering inflammation expressed on myeloid cells	n.s.	n.s.	-1.17 (0.048)
TREML1	co-regulation of TREM receptors, amplification of inflammatory signals	n.s.	-1.23 (0.006)	-1.24 (0.02)
TNF- α	proinflammatory cytokine involved in cell proliferation, differentiation, apoptosis and coagulation; mainly secreted by macrophages	n.s.	1.19 (0.02)	n.s.
TNFRSF11A	TNF-receptor, activator of NF- κ B; regulator of interaction between T and dendritic cells	1.21 (0.009)	1.14 (0.03)	1.17 (0.007)
p50	50 kD DNA binding subunit of NF- κ B (NFKB1)	1.18 (0.01)	1.12 (0.04)	n.s.
p100	transcriptional coactivator (NFKB2); processed into the p52 NF- κ B subunit; involved in dendritic cell differentiation	1.31 (0.01)	1.23 (0.02)	n.s.
RelB	transcriptional corepressor of NF- κ B; involved in T and dendritic cell differentiation	n.s.	1.18 (0.02)	n.s.
A20	antagonist of NF- κ B	1.29	1.26	n.s.

	signalling; inhibition of association of TRAF6 and NIK	(0.03)	(0.01)	
IκBa	inhibition of translocation to nucleus of NF-κB	1.39 (0.009)	1.38 (0.01)	1.24 (0.03)
BCL3	inhibition of translocation to nucleus of NF-κB	1.37 (0.01)	1.55 (0.006)	1.41 (0.03)
IL-2	essential role in the immune response to antigenic stimuli; proliferation of T and B lymphocytes	n.s.	1.16 (0.049)	n.s.
IL-7	important for B and T cell development and cell survival	n.s.	1.43 (0.04)	n.s.
IL-8	T cell chemotactic factor; angiogenic factor; mediates inflammatory responses	n.s.	1.34 (0.03)	n.s.
SOCS3	Suppresses pro-inflammatory cytokine signalling; inhibitor of JAK2 and STAT3 signalling	n.s.	1.32 (0.046)	n.s.
ADM	Suppresses pro-inflammatory cytokines, chemokines and NO production; inhibits T cell proliferation, induces Treg	n.s.	n.s.	1.32 (0.026)

The numbers indicate fold-changes with corresponding P-values; only statistically significant fold-changes are shown (Bayesian paired t-test, significance threshold $P < 0.05$). AID (AICDA); APRIL (TNFSF13); A20 (TNFAIP3); BAFF (TNFSF13B); IκBα (NFKBIA); ADM (adrenomedullin). "n.s." for "no significantly different expression found between bacterial and placebo control treatments". Data based on expression profiles from eight healthy adult individuals.

¹ very low basal expression