Supplement Material

Online Figure I



Online Figure I. Time kinetics and dose dependence of TLR4 and TLR5 stimulation of human macrovessels. Human temporal arteries from 3 donors were incubated with LPS at different concentrations (0, 0.3, 3 μ g/ml) for 14 h (**A**) or at 3 μ g/ml for 12, 24, or 48 h (**B**). Human temporal arteries were incubated with flagellin for 14 h at different concentrations (0, 3 or 6 μ g/ml) (**C**) or at 3 μ g/ml for 12, 24, or 48 h (**D**). CD83 gene expression was quantified by real-time PCR. Data are from three independent experiments and presented as mean \pm SEM.

Online Figure II



Online Figure II. Efficiency of TLR4 and TLR5 agonists to facilitate T-cell recruitment and activation. Human temporal artery-SCID chimeras were treated with saline, LPS, or flagellin as described in Fig. 2. Purified human CD4 T cells were adoptively transferred one day later. Human artery grafts were retrieved 7 days later, and RNA was isolated. Gene expression of T-cell receptors (**A**) or IFN- γ (**B**) in the grafts was quantified by real-time PCR with human-specific primers. Data are from three independent experiments and presented as mean \pm SEM.

Online Figure III



Online Figure III. TLR4 agonists preferentially induce production of the chemokine

CCL20 in vivo. Human temporal arteries were engrafted into SCID mice and injected with PBS, TLR4 ligands (LPS), or TLR5 ligands (flagellin) as described in Fig. 2. Human CD4 T cells were isolated and injected into the chimeras one day later. Artery grafts were retrieved after 7 days and processed for RNA isolation. Expression of transcripts specific for the chemokine CCL20 was analyzed by qRT-PCR. Data are from three independent experiments and presented as mean ± SEM.

Online Table I. Human-specific primer pairs for mRNA quantification

Gene	Sense	Anti-sense	
TLR4	5-CTGCAATGGATCAAGGACCA-3	5-TTATCTGAAGGTGTTGCACATTCC-3	
TLR5	5-TGCCTTGAAGCCTTCAGTTATG-3	5-CCAACCACCACCATGATGAG-3	
CD83	5-GTTATTGGAGGGTGGTGAAGAGAGG-3	5-GTGAGGAGTCACTAGCCCTAAATGC-3	
CD11c	5-ACTTACTTACCCTCACCTGTCAGG-3	5-AGGTAGAAATTGCAAGTCAAGTCC-3	
CD11b	5-CACATGACTTTCGGCGGATGA-3	5-GCTGCGTTATTGGCTTCACC-3	
CD209	5-TGCAGTCTTCCAGAAGTAACCGCT-3	5-TGTTGGGCTCTCCTCTGTTCCAAT-3	
CCL20	5-GCGCAAATCCAAAACAGAC-3	5-AACCTCCAACCCCAGCA-3	
CCR6	5-GGCGACTAAGTCATTCCG-3	5-CTCCGAGACAGTCTGGTAC-3	
TCR	5-CCTTCAACAACAGCATTATTCCAG-3	5-CGAGGGAGCACAGGCTGTCTTA-3	
IFN-γ	5-ACCTTAAGAAATATTTTAATGC-3	5-ACCGAATAATTAGTCAGCTT-3	
Smoothelin	5-TTGGACAAGATGCTGGATCA-3	5-CGCTGGTCTCTCTTCCTTTG-3	
β-actin	5-ATGGCCACGGCTGCTTCCAGC-3	5-CATGGTGGTGCCGCCAGACAG-3	

Ligand	(µg/ml) -	CD83 expression (fold induction)	
Liganu		Lymph node	Skin
LTA	500	12	N/A
Poly (I:C)	100	11	2.7
LPS	3	3.5	42
Flagellin	3	398	1.0
CpG	50	5	1.3

Online Table II. Responsiveness of human tissues to different TLR agonists