

HOTLINE: Effective November 16, 2020

0051589 Toll-Like Receptor Function

TLR

Interpretive Data:

Toll-like receptors (TLR) are tested independently by stimulation with TLR-specific ligands in a peripheral blood mononuclear cell (PBMC) culture. PBMC production of IL-1 beta, IL-6, and TNF alpha is determined by multiplex bead assay for TLR 1,2,4-8.

TLR-specific ligands include Pam3CSK4, a synthetic bacterial lipoprotein (TLR2-TLR1 ligand); zymosan cell wall particles from *Saccharomyces cerevisiae* (TLR6-TLR2 ligand); lipopolysaccharide (LPS) ultra-pure *S. minnesota* LPS (TLR4 ligand); flagellin purified from *S. typhimurium* (TLR5 ligand); and CL097 imidazoquinoline compound (TLR7-TLR8 ligand).

See Compliance Statement B: www.aruplab.com/CS

Note: Results for TNF alpha, IL-1 beta, and IL-6 are reported as pg/mL. Interpretation comparing the patient results to the simultaneously collected client normal control and the laboratory normal control will be provided by an ARUP medical director.

Limitation: Defects in IRAK-4 and MyD88 result in compromised TLR signaling. Exception is endosomal TLR4, which is IRAK-4 and MyD88 independent.

CPT Code(s): 86353 x**5**; 83520 x3