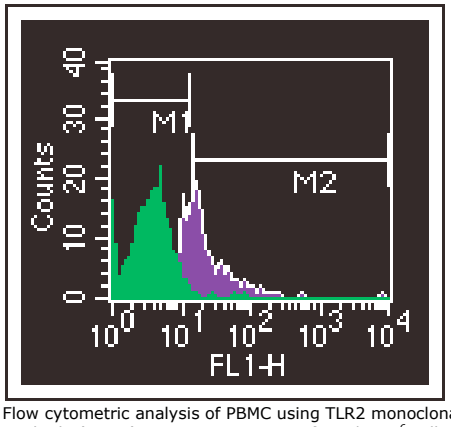
TLR2 Monoclonal Antibody (TL2.1)

Product Specifications

Catalog Number:	CSA-780
Host:	Mouse
Isotype:	IgG_{2a}
Species Reactivity:	Human
Applications: *The optimal dilution for a specific application must be determined by the investigator*	**IP**[7]**:** 2-5 µg/mL **Flow**[7-8]**:** 2-5 µg/10^6 cells
Predicted m.w:	~86 kDa
Concentration:	See product label
Purification:	Protein G affinity
Format:	PBS
Storage: *Shipping conditions may differ from the recommended storage temperature*	Store at -20°C
Immunogen:	CHO cells transfected with human TLR2 cDNA
Related Products:	
CSA-780FI	TLR2 Monoclonal Antibody (TL2.1) FITC Conjugate
CSA-780PE	TLR2 Monoclonal Antibody PE Conjugate
905-710	TLR2 Polyclonal Antibody



Flow cytometric analysis of PBMC using TLR2 monoclonal antibody (TL2.1), at a concentration of 1µg/1x10^6 cells (M2 gate); M1 gate represents unstained PBMC.

Background:

Members of the Toll-like receptor (TLR) family of evolutionarily conserved pattern recognition molecules play a key role in host defense during microbial infection by regulating both innate and adaptive immune responses. TLRs are type I transmembrane proteins with ectodomains containing interspersed leucine-rich repeat (LRR) motifs involved in the recognition of various microbial ligands. All members of the family share a sequence in their cytoplasmic domain with the Type I IL-1 receptor (TIR) which is involved in signal transduction via NFκB and the activation of target genes[1-4]. TLR2 forms heterocomplexes with various receptors to mediate the immune response to specific bacterial immunogens, including Gram-positive bacteria, diacyl- and triacyl-lipopeptides, and mycobacterial wall constituents[5]. Heterodimers of TLR2/TLR1 recognize triacylated bacterial lipopeptides, whereas TLR2/TLR6 heterodimers detect diacylated lipopeptides common to mycoplasma. TLR2 dimerizes with the non-TLR receptor Dectin-1 to form a receptor complex responsible for the recognition of zymosan and *Candida albicans*. Binding of bacterial ligands to TLR2 receptor complexes triggers the activation of common IL-1/TLR signaling pathways utilizing MyD88, IRAKs, and TRAF6[6].

References:

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4. Akira, S., *et al*. (2001) Nat Immunol. **2**, 675 –680.
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6. Netea, M.G., et al. (2004) J Leukoc Biol. **75**, 749-755.
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8. Medvedev, A.E., *et al*. (2002) J Immunol **169**(9), 5209-5216.

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Last Revised: 9/14/2007