

**SM1677P****Monoclonal Antibody to CD284 / TLR4 - Purified**

<b>Alternate names:</b>	Toll-like receptor 4
<b>Quantity:</b>	0.2 mg
<b>Concentration:</b>	1.0 mg /ml
<b>Background:</b>	TLR4, also known as CD284, has been demonstrated to act as alpha receptor for LPS on human monocytes and macrophages. TLR4 signalling of LPS stimulation requires the presence of the MD-2 molecule. TLR4 is weakly expressed by resting cells, but is upregulated following stimulation with LPS.
<b>Uniprot ID:</b>	<a href="#">O00206</a>
<b>NCBI:</b>	<a href="#">NM_138554.3</a>
<b>GeneID:</b>	<a href="#">7099</a>
<b>Host / Isotype:</b>	Mouse / IgG2a
<b>Recommended Isotype Controls:</b>	AM03096PU-N
<b>Clone:</b>	HTA125
<b>Immunogen:</b>	Ba/F3 cell line expressing TLR4 (CD284)
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Purification:</b> Affinity Chromatography on Protein G <b>Buffer System:</b> PBS <b>Preservatives:</b> 0.09% Sodium Azide
<b>Applications:</b>	<b>Flow Cytometry:</b> Use 10 µl of 1/10-1/25 diluted antibody to label 10 <sup>6</sup> cells or 100 µl whole blood. <b>Immunoprecipitation.</b> <b>Western Blot.</b> Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody recognizes the Toll like receptor 4 (TLR4) cell surface antigen. This antibody has been demonstrated to block activation of monocytes with LPS. We recommend the use of SM1677LE <b>Species:</b> Human, Monkey, Rhesus monkey, Pig and Guinea Pig. Other species not tested.
<b>Storage:</b>	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Shimazu R, Akashi S, Ogata H, Nagai Y, Fukudome K, Miyake K, et al. MD-2, a molecule that confers lipopolysaccharide responsiveness on Toll-like receptor 4. J Exp Med. 1999 Jun 7;189(11):1777-82. PubMed PMID: 10359581. 2. Jiang Q, Akashi S, Miyake K, Petty HR. Lipopolysaccharide induces physical proximity between CD14 and toll-like receptor 4 (TLR4) prior to nuclear translocation

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human monocyte CD14 by cysteine proteinases (gingipains) from *Porphyromonas gingivalis* leading to lipopolysaccharide hyporesponsiveness. *J Immunol.* 2000 Jul 1;165(1):411-8. PubMed PMID: 10861079.

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#### Pictures:

Staining of Human peripheral blood monocytes with Mouse Anti Human CD284 Antibody (Cat.-No SM1677P).

