

Polyclonal Antibody to MD-2

Alternate names:	MD2
Catalog No.:	SP7113P
Quantity:	0.2 ml
Host:	Rabbit
Immunogen:	This antibody was developed against a KLH-conjugated synthetic peptide corresponding to amino acids 120-133 of human MD-2.
Applications:	Western blot analysis: 1:500-1:1000. A 30 kDa band should be observed. Human spleen or Ramos can be used as positive control. Other applications not tested. Optimal dilutions of this antibody are dependent on conditions and should be determined by the user. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The Toll-like receptor (TLR) family in mammal comprises a family of transmembrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and IL-1 receptor motif in the cytoplasmic domain. Like its counterparts in Drosophila, TLRs signal through adaptor molecules. Toll-like receptor 4 (TLR4), the principal signaling receptor for lipopolysaccharide (LPS) in mammals, requires the binding of MD-2 to its extracellular domain for maximal responsiveness. MD-2 enables TLR4 to respond to a wide variety of LPS partial structures, Gram-negative bacteria, and Gram-positive lipoteichoic acid, but not to Gram-positive bacteria, peptidoglycan, and lipopeptide.
Storage:	Store the antibody at 4-8°C for one month or at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	<ol style="list-style-type: none"> 1. Shimazu R, Akashi S, Ogata H, Nagai Y, Fukudome K, Miyake K, Kimoto M. J. Exp. Med. 189 (11), 1777-82 (1999). 2. Akashi S, Shimazu R, Ogata H, Nagai Y, Takeda K, Kimoto M, Miyake K. J Immunol 164(7): 3471-3475 (2000). 3. Mancek M, Pristovsek P, Jerala R. Biochem Biophys Res Commun 292(4):880-885 (2002). 4. Abreu MT, Arnold ET, Thomas LS, Gonsky R, Zhou Y, Hu B, Arditi M. J Biol Chem [epub ahead of print] March 28 (2002). 5. Akashi S, Nagai Y, Ogata H, Oikawa M, Fukase K, Kusumoto S, Kawasaki K, Nishijima M, Hayashi S, Kimoto M, Miyake K. Int Immunol 2001 Dec;13(12):1595-1599 (2001). 6. Viriyakosol S, Tobias PS, Kitchens RL, Kirkland TN. J Biol Chem 276(41):38044-38051 (2001). <p>Product Citations:</p> <ol style="list-style-type: none"> 1. Combinational clustering of receptors following stimulation by bacterial products determines LPS responses. Martha Triantafyllou, Klaus Brandenburg, Shoichi Kusumoto,

Koichi Fukase, Alan Mackie, Ulrich Seydel and Kathy Triantafilou. Biochemical Journal Immediate Publication. Published on 24 Mar 2004 as man

Pictures:

Western blot analysis of MD-2 in cell lysate from human spleen using SP7113P at 1:500 dilution

