

Datasheet for ABIN1108190 **anti-LY96 antibody**



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Overview

Quantity:	0.1 mg
Target:	LY96
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This LY96 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Enzyme Immunoassay (EIA), Functional Studies (Func)

Product Details

Immunogen:	Baculovirally expressed His-tagged human MD-2
Clone:	4H1
Isotype:	IgG1
Specificity:	This antibody reacts with soluble MD-2 (sMD-2) and the sMD-2/Toll-like receptor 4 (TLR4, CD284) complex. It reacts with both the monomeric and the polymeric form of sMD-2.
No Cross-Reactivity:	Mouse (Murine)
Cross-Reactivity (Details):	Species reactivity (tested):Human.
Purification:	Protein G

Target Details

Target:	LY96
Alternative Name:	MD-2 (LY96 Products)
Background:	TLRs belong to a family of proteins that specifically recognizes and senses microbial products. They are highly conserved throughout evolution and act as innate immune recognition receptors against many pathogens. TLR4 is a functional receptor for gram-negative bacterial lipopolysaccharides (LPS). TLR4 associates with MD-2 which is absolutely required for LPS-induced activation of TLR4. MD-2 exists as a cell surface protein in association with TLR4. It also exists as secreted forms consisting of MD-2 monomer and multimers. Circulating sMD-2 is mainly present as a doublet of ~20 and 25 kD, representing differentially glycosylated forms. Unlike TLR4, sMD-2 binds directly LPS without the need of soluble CD14 (sCD14). However, LPS-MD-2 interactions are increased when LPS is pretreated with CD14. Only monomeric sMD-2 is biologically active and able to associate with TLR4 and LPS. sMD-2 circulates in plasma of healthy individuals as a non-active, polymeric protein. In septic plasma, the total amount of sMD-2 was strongly elevated and contained both sMD-2 polymers and monomers. Soluble MD-2 is proposed to be an important mediator of organ inflammation during sepsis. During experimental human endotoxemia, the monomeric and total sMD-2 content in plasma increased with the kinetics of an acute phase protein. This parallels enhanced TLR4 costimulatory activity. In vitro studies revealed that sMD-2 release appears to be restricted to endothelial and dendritic cells. Synonyms: ESOP-1, ESOP1, LY96, Lymphocyte antigen 96, MD2
Gene ID:	23643
NCBI Accession:	NP_001182726
UniProt:	Q9Y6Y9
Pathways:	TLR Signaling , Activation of Innate immune Response , Cellular Response to Molecule of Bacterial Origin , Toll-Like Receptors Cascades

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only
Handling	
Concentration:	0.1 mg/mL
Buffer:	PBS, 0.1 % bovine serum albumin

Handling

Storage:	4 °C
Storage Comment:	Store at 2 - 8 °C.