

Datasheet for ABIN1108189

anti-LY96 antibody



Overview

Quantity:	0.1 mg
Target:	LY96
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This LY96 antibody is un-conjugated
Application:	Functional Studies (Func)

Product Details

Immunogen:	TLR4/MD-2 expressing CHO cells/ chimeric TLR4/MD-2 fusion protein
Clone:	18H10
Isotype:	lgG2b
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 LPSinduced 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 monomers and multimers (sMD-2). 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

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