

CD-14 Antibody (Clone biG 10) Mouse Monoclonal Antibody Catalog # ABV10512

#### **Specification**

### CD-14 Antibody (Clone biG 10) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>P08571</u> Human, Bovine, Horse Mouse Monoclonal Mouse IgG 40076

#### CD-14 Antibody (Clone biG 10) - Additional Information

Gene ID 929

Application & Usage

Suitable for immunostaining of CD14positive cells (Flow Cytometry); ELISA; CD14 inhibition studies; Western Blot

**Other Names** CD14, Cluster of differentiation 14

Target/Specificity CD-14

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** Human CD-14 was lyophilized from a concentrated protein solution (1 mg/ml) containing phosphate-buffered saline, pH 7.2

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

Precautions

CD-14 Antibody (Clone biG 10) is for research use only and not for use in diagnostic or therapeutic procedures.



# CD-14 Antibody (Clone biG 10) - Protein Information

### Name CD14

### Function

Coreceptor for bacterial lipopolysaccharide (PubMed:<a

href="http://www.uniprot.org/citations/1698311" target="\_blank">1698311</a>, PubMed:<a href="http://www.uniprot.org/citations/23264655" target=" blank">23264655</a>). In concert with LBP, binds to monomeric lipopolysaccharide and delivers it to the LY96/TLR4 complex, thereby mediating the innate immune response to bacterial lipopolysaccharide (LPS) (PubMed:<a href="http://www.uniprot.org/citations/20133493" target=" blank">20133493</a>, PubMed:<a href="http://www.uniprot.org/citations/23264655" target=" blank">23264655</a>, PubMed:<a href="http://www.uniprot.org/citations/22265692" target="\_blank">22265692</a>). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:<a href="http://www.uniprot.org/citations/8612135" target=" blank">8612135</a>). Acts as a coreceptor for TLR2:TLR6 heterodimer in response to diacylated lipopeptides and for TLR2:TLR1 heterodimer in response to triacylated lipopeptides, these clusters trigger signaling from the cell surface and subsequently are targeted to the Golgi in a lipid-raft dependent pathway (PubMed: <a href="http://www.uniprot.org/citations/16880211" target=" blank">16880211</a>). Binds electronegative LDL (LDL(-)) and mediates the cytokine release induced by LDL(-) (PubMed:<a href="http://www.uniprot.org/citations/23880187" target=" blank">23880187</a>).

#### **Cellular Location**

Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Membrane raft. Golgi apparatus. Note=Secreted forms may arise by cleavage of the GPI anchor.

#### Tissue Location

Detected on macrophages (at protein level) (PubMed:1698311). Expressed strongly on the surface of monocytes and weakly on the surface of granulocytes; also expressed by most tissue macrophages.

# CD-14 Antibody (Clone biG 10) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

### CD-14 Antibody (Clone biG 10) - Images

# CD-14 Antibody (Clone biG 10) - Background

The CD14 glycoprotein, gp 55, is present on most monocytic and macrophages like cell types: monocytes, macrophages, Kupffer cells, pleural phagocytic cells and dendritic reticular cells. CD14 is also observed on granulocytes and activated or transformed B-cells. Furthermore CD14 is present in a soluble form in human serum, urine and other body fluids. The CD14 molecule has been reported to be a receptor for endotoxin.