

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone LPSR/553]
Catalog # AH12645

Specification

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide - Product Information

Application	,3,4,
Primary Accession	P08571
Other Accession	929 , 163867
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	55kDa kDa

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 929

Other Names

Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein, CD14, Monocyte differentiation antigen CD14, urinary form, Monocyte differentiation antigen CD14, membrane-bound form, CD14

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide - Protein Information

Name CD14

Function

Coreceptor for bacterial lipopolysaccharide (PubMed: [1698311](http://www.uniprot.org/citations/1698311)), PubMed: [23264655](http://www.uniprot.org/citations/23264655)). 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: [20133493](http://www.uniprot.org/citations/20133493)), PubMed: [22265692](http://www.uniprot.org/citations/22265692)), PubMed: [23264655](http://www.uniprot.org/citations/23264655)). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the

inflammatory response (PubMed:8612135). 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:16880211). Binds electronegative LDL (LDL(-)) and mediates the cytokine release induced by LDL(-) (PubMed:23880187).

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.

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide - Images

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide - Background

Recognizes a protein of 55kDa, identified as CD14 (also known lipopolysaccharide receptor). CD14 is expressed strongly on monocytes and macrophage and weakly on the surface of neutrophils. CD14 is anchored to cells by linkage to glycosylphosphatidylinositol (GPI) and functions as a high affinity receptor for complexes of LPS and LPS binding protein (LBP). Soluble CD14, also binding to LPS, acts at physiological concentration as an LPS agonist and has, at higher concentrations, an LPS antagonizing effect in cell activation.

CD14 (Monocyte / Macrophage Marker) Antibody - With BSA and Azide - References

Simmons, D.L., et al. 1989. Monocyte antigen CD14 is a phospholipid anchored membrane protein. Blood 73: 284-289. | Schumann, R.R. 1992. Function of lipopolysaccharide (LPS)-binding protein (LBP) and CD14, the receptor for LPS/LBP complexes: a short review. Res. Immunol. 143: 11-15