

Anti-CD14 Antibody
Catalog # ABO10764**Specification**

Anti-CD14 Antibody - Product Information

Application	WB
Primary Accession	P10810
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Monocyte differentiation antigen CD14(CD14) detection. Tested with WB in Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD14 Antibody - Additional Information

Gene ID 12475

Other Names

Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein, CD14, Cd14

Calculated MW

39204 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Mouse

Subcellular Localization

Cell membrane; Lipid-anchor, GPI-anchor.

Protein Name

Monocyte differentiation antigen CD14

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of mouse CD14(152-165aa TRDAWLAELQQWLK).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-CD14 Antibody - Protein Information**Name** Cd14**Function**

Coreceptor for bacterial lipopolysaccharide. 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: [16148141](http://www.uniprot.org/citations/16148141)). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed: [15895089](http://www.uniprot.org/citations/15895089), PubMed: [8612135](http://www.uniprot.org/citations/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 (By similarity). Acts as an accessory receptor for M.tuberculosis lipoproteins LprA, LprG and LpqH, in conjunction with coreceptors TLR2 and TLR1. The lipoproteins act as agonists to modulate antigen presenting cell functions in response to the pathogen (PubMed: [19362712](http://www.uniprot.org/citations/19362712)). Binds electronegative LDL (LDL(-)) and mediates the cytokine release induced by LDL(-) (By similarity).

Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P08571}. Secreted {ECO:0000250|UniProtKB:P08571}. Membrane raft {ECO:0000250|UniProtKB:P08571}. Golgi apparatus {ECO:0000250|UniProtKB:P08571}. Note=Soluble, secreted forms seem to exist. They may arise by cleavage of the GPI anchor {ECO:0000250|UniProtKB:P08571}

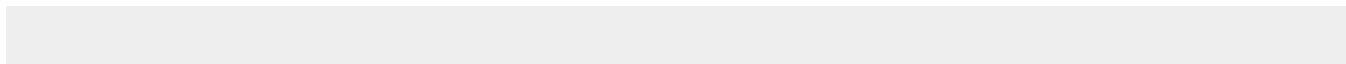
Tissue Location

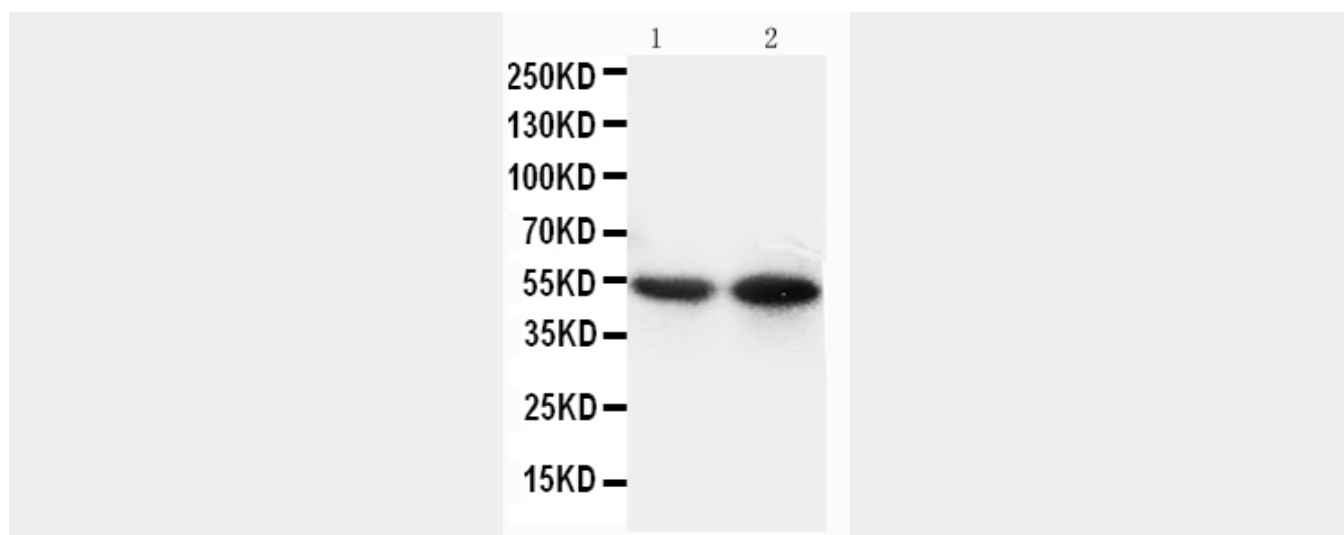
Detected on peritoneal macrophages (at protein level) (PubMed:8612135). Cell surface expression detected in lung alveolar macrophages, dendritic macrophages and lung macrophages (at protein level) (PubMed:19362712).

Anti-CD14 Antibody - 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](#)

Anti-CD14 Antibody - Images



Anti-CD14 antibody, ABO10764, Western blotting Lane 1: Mouse Thymus Tissue Lysate Lane 2: Mouse Spleen Tissue Lysate

Anti-CD14 Antibody - Background

CD14, Cluster of differentiation 14, single-copy gene encoding 2 protein forms: a 50- to 55-kD glycosylphosphatidylinositol-anchored membrane protein(mCD14) and a monocyte or liver-derived soluble serum protein(sCD14) that lacks the anchor. By in situ hybridization and study of somatic cell hybrid DNA that the gene is located at bands 5q23-q31. CD14 acts as a co-receptor(along with the Toll-like receptor TLR 4 and MD-2) for the detection of bacterial lipopolysaccharide(LPS). CD14 can bind LPS only in the presence of lipopolysaccharide-binding protein(LBP). Although LPS is considered its main ligand, CD14 also recognizes other pathogen-associated molecular patterns.