

# Anti-CD14 Antibody

Catalog # ABO10764

## Product Information

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|--------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                                                 |
| <b>Primary Accession</b> | <a href="#">P10810</a>                                                                                             |
| <b>Host</b>              | Rabbit                                                                                                             |
| <b>Reactivity</b>        | Mouse                                                                                                              |
| <b>Clonality</b>         | Polyclonal                                                                                                         |
| <b>Format</b>            | Lyophilized                                                                                                        |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Monocyte differentiation antigen CD14(CD14) detection. Tested with WB in Mouse. |
| <b>Reconstitution</b>    | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                               |

## Additional Information

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| <b>Gene ID</b>                  | 12475                                                                                                                                                                              |
| <b>Other Names</b>              | Monocyte differentiation antigen CD14, Myeloid cell-specific leucine-rich glycoprotein, CD14, Cd14                                                                                 |
| <b>Calculated MW</b>            | 39204                                                                                                                                                                              |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Mouse                                                                                                                                                 |
| <b>Subcellular Localization</b> | Cell membrane; Lipid-anchor, GPI-anchor.                                                                                                                                           |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                          |
| <b>Protein Name</b>             | Monocyte differentiation antigen CD14                                                                                                                                              |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.                                                                                             |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence in the middle region of mouse CD14(152-165aa TRDAWLAELQQWLK).                                                                      |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                       |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                                            |
| <b>Storage</b>                  | 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. |

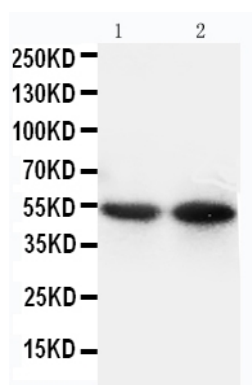
## Protein Information

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| 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: <a href="#">16148141</a> ). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed: <a href="#">15895089</a> , PubMed: <a href="#">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 (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: <a href="#">19362712</a> ). 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## 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.

## Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.