

# **CD14 Antibody**

Rabbit mAb Catalog # AP90725

# **Specification**

### **CD14 Antibody - Product Information**

Application WB, IHC, ICC Primary Accession P08571 Clonality Monoclonal

**Other Names** 

CD14; Monocyte differentiation antigen CD14; Myeloid cell specific leucine rich glycoprotein;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 40076 Da

# **CD14 Antibody - Additional Information**

Dilution WB~~1:1000

IHC~~1:100~500

ICC~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

**CD14** 

Description CD14 antigen is a GPI-linked glycoprotein

with a molecular weight of 55kD. The CD14

antigen is expressed on cells of the

myelomonocytic lineage including monocytes, macrophages and Langerhans

cells. Low expression is observed on neutrophils and on human B cells. CD14 antigen is a receptor for bacterial

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lipopolysaccharide (LPS, endotoxin) and the lipopolysaccharide binding protein (LBP). LBP and CD14 antigen serves two

physiological roles.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

# **CD14 Antibody - 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/22265692" target="\_blank">22265692</a>, PubMed:<a href="http://www.uniprot.org/citations/23264655" target="\_blank">23264655</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.

# **CD14 Antibody - Protocols**

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

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

# CD14 Antibody - Images



