

#### CD14 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6294B

### **Specification**

### CD14 Antibody (C-term) - Product Information

Application FC, WB, IHC-P,E

Primary Accession
Reactivity
Human
Host
Clonality
Isotype
Antigen Region
Reactivity
Rabbit
Polyclonal
Rabbit IgG
292-322

## CD14 Antibody (C-term) - 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

#### Target/Specificity

This CD14 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 292-322 amino acids from the C-terminal region of human CD14.

## **Dilution**

FC~~1:10~50 WB~~1:1000 IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

CD14 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### CD14 Antibody (C-term) - Protein Information

### Name CD14



**Function** Coreceptor for bacterial lipopolysaccharide (PubMed:<u>1698311</u>, PubMed:<u>23264655</u>). 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:<u>20133493</u>, PubMed:<u>22265692</u>, PubMed:<u>23264655</u>). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:<u>8612135</u>). 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:<u>16880211</u>). Binds electronegative LDL (LDL(-)) and mediates the cytokine release induced by LDL(-) (PubMed:<u>23880187</u>).

#### **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**

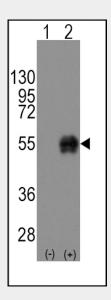
Detected on macrophages (at protein level) (PubMed:1698311). Expressed strongly on the surface of monocytes and weakly on the surface of granulocytes; also expressed by most tissue macrophages.

#### CD14 Antibody (C-term) - Protocols

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

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

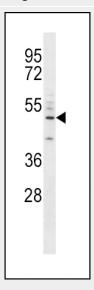
## CD14 Antibody (C-term) - Images



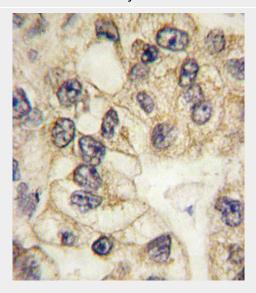
Western blot analysis of CD14(arrow) using rabbit polyclonal CD14 Antibody (C-term) (Cat.#AP6294b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently



transfected with the CD14 gene (Lane 2) (Origene Technologies).

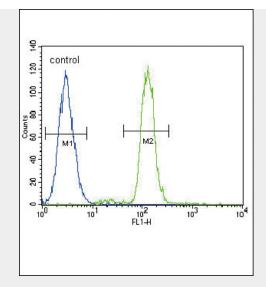


CD14 Antibody (C-term) (Cat.#AP6294b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the CD14 antibody detected the CD14 protein (arrow).



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CD14 antibody (C-term) (Cat.#AP6294b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





CD14 Antibody (C-term) (Cat. #AP6294b) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## CD14 Antibody (C-term) - Background

CD14 is a surface protein preferentially expressed on monocytes/macrophages. It binds lipopolysaccharide binding protein and recently has been shown to bind apoptotic cells.

# CD14 Antibody (C-term) - References

Donati, M., J. Periodontol. 79 (3), 517-524 (2008) Yuan, F.F., Immunol. Cell Biol. 86 (3), 268-270 (2008) Setoguchi, M., Biochim. Biophys. Acta 1008 (2), 213-222 (1989) Goyert, S.M., Science 239 (4839), 497-500 (1988)