

CD14 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6294A

Product Information

Application	IHC-P, WB, FC, IF, IHC-P-Leica, E
Primary Accession	P08571
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14105
Calculated MW	40076
Antigen Region	54-83

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 54-83 amino acids from the N-terminal region of human CD14.
Dilution	IHC-P~~1:100 WB~~1:1000 FC~~1:25 IF~~1:25 IHC-P-Leica~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD14
Function	Coreceptor for bacterial lipopolysaccharide (PubMed: 1698311 , PubMed: 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](#), PubMed:[22265692](#), PubMed:[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.

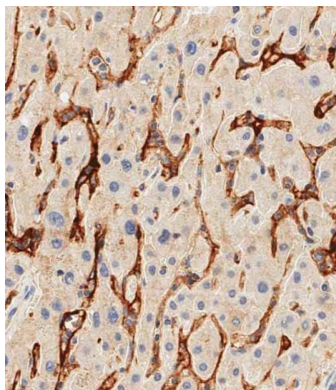
Background

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

References

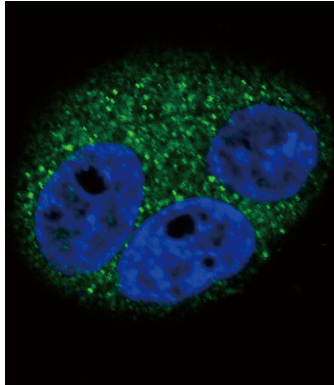
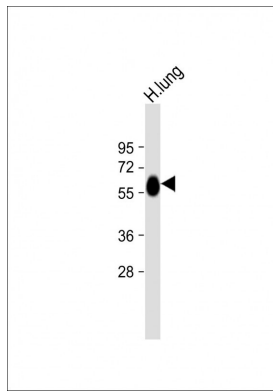
- Donati,M., J. Periodontol. 79 (3), 517-524 (2008)
Yuan,F.F., Immunol. Cell Biol. 86 (3), 268-270 (2008)
Setoguchi,M., Biochim. Biophys. Acta 1008 (2), 213-222 (1989)
Goyert,S.M., Science 239 (4839), 497-500 (1988)

Images

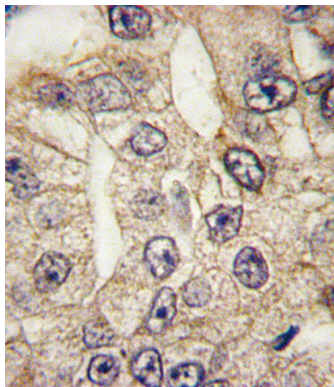


Immunohistochemical analysis of paraffin-embedded human liver tissue using AP6294A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

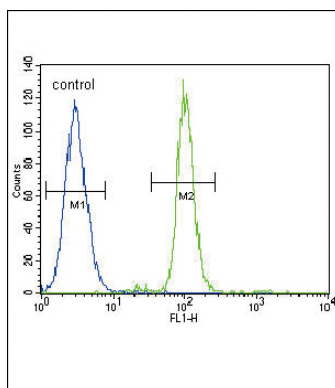
Anti-CD14 Antibody (N-term) at 1:2000 dilution + Human lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



Confocal immunofluorescent analysis of CD14 Antibody (N-term)(Cat#AP6294a) with A549 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CD14 antibody (N-term) (Cat.#AP6294a), 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 (N-term) (Cat. #AP6294a) 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.

Citations

- [Enhanced autophagy promotes the clearance of in diabetic rats with wounds](#)
- [Endothelialization of arterial vascular grafts by circulating monocytes](#)
- [Tandem Repeat Effector Targets Differentially Influence Infection](#)
- [Negative regulation of Toll-like receptor-4 signaling through the binding of glycosylphosphatidylinositol-anchored glycoprotein, CD14, with the sialic acid-binding lectin, CD33.](#)

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