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CD14 Antibody

Rabbit mAb
Catalog # AP90725

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	P08571
Reactivity	Human
Clonality	Monoclonal
Other Names	CD14; Monocyte differentiation antigen CD14; Myeloid cell specific leucine rich glycoprotein;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	40076

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
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 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.

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).

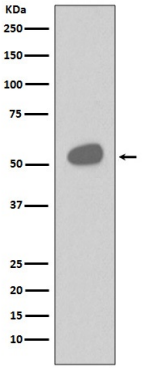
Cellular Location

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.

Images



Western blot analysis of CD14 expression in Human tonsil cell lysate.

Image not found : 202311/AP90725-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human breast, using CD14 Antibody.

Image not found : 202311/AP90725-IF.jpg

Immunofluorescent analysis of K562 cells, using CD14 Antibody.

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