

CD-14 Antibody (CT) Rabbit Polyclonal Antibody Catalog # ABV11282

Specification

CD-14 Antibody (CT) - Product Information

Application	WB, IHC, FC
Primary Accession	<u>P08571</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
lsotype	Rabbit IgG
Calculated MW	40076

CD-14 Antibody (CT) - Additional Information

Gene ID 929

Positive Control	Western blot: 293 cells, A549 cells lysate, IHC: human lung carcinoma, FACS:
Application & Usage	A549 cells Western blot:
	~1:1000, IHC:
	~1:10-1:50, FACS:
	~ 1:10-1:50 .

Other Names

CD14; Monocyte differentiation antigen CD14; Myeloid cell-specific leucine-rich glycoprotein; CD_antigen=CD14; Monocyte differentiation antigen CD14, urinary form; Monocyte differentiation antigen CD14, membrane-bound form.

Target/Specificity CD-14

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μI of antibody in PBS with 0.09% (W/V) sodium azide

Handling The antibody solution should be gently

CD-14 Antibody (CT) - Background

Lipopolysaccharide (LPS) elicits the secretion of mediators and cytokines produced by activated macrophages and monocytes. CD14 is a glycosylphosphatidylinositol (GPI)-anchored protein found on the surfaces of monocytes and polymorphonuclear leukocytes. CD14 functions as a receptor for LPS, resulting in the secretion of various proteins. An important component in the LPS activation of monocytes through the CD14 receptor is the "adapter molecule," lipopolysaccharide binding protein (LBP). There are two forms of CD14, a membrane-associated form (mCD14), and a soluble form (sCD14). mCD14 responds to LPS alone and facilitates the secretion of proteins, while cells not expressing mCD14 fail to respond to LPS. The cells that lack mCD14 respond to LPS/LBP in the presence of sCD14.



mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions

CD-14 Antibody (CT) is for research use only and not for use in diagnostic or therapeutic procedures.

CD-14 Antibody (CT) - 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:23264655, PubMed: 22265692). 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:<a h ref="http://www.uniprot.org/citations/16880 211" target=" blank">16880211). Binds electronegative LDL (LDL(-)) and mediates the cytokine release induced by LDL(-) (PubMed:<a href="http://www.unipro t.org/citations/23880187"



target="_blank">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.

CD-14 Antibody (CT) - Protocols

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

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