

Anti-CD14 Picoband Antibody

Catalog # ABO12533

Product Information

Application	WB, IHC-P
Primary Accession	P08571
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Monocyte differentiation antigen CD14(CD14) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	40076
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human
Subcellular Localization	Cell membrane ; Lipid- anchor, GPI-anchor . Secreted . Membrane raft . Golgi apparatus . Secreted forms may arise by cleavage of the GPI anchor. .
Tissue Specificity	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. .
Source	Eukaryota
Protein Name	Monocyte differentiation antigen CD14
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human CD14 recombinant protein (Position: N65-D327). Human CD14 shares 69.8% and 66.8% amino acid (aa) sequence identity with mouse and rat CD14, respectively.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.

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.

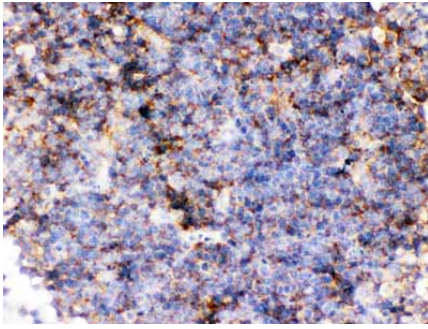
Background

CD14 is a single-copy gene encoding 2 protein forms: a 50- to 55-kD glycosylphosphatidylinositol-anchored membrane protein (mCD14) and a monocyte or liver-derived soluble serum protein (sCD14) that lacks the anchor. This gene is located at bands 5q23-q31. The protein encoded by this gene is a surface antigen that is preferentially expressed on monocytes/macrophages. CD14 acts as a co-receptor (along with the Toll-like receptor TLR 4 and MD-2) for the detection of bacterial lipopolysaccharide (LPS). CD14 can bind LPS only in the presence of lipopolysaccharide-binding protein (LBP). Although LPS is considered its main ligand, CD14 also recognizes other pathogen-associated molecular patterns.

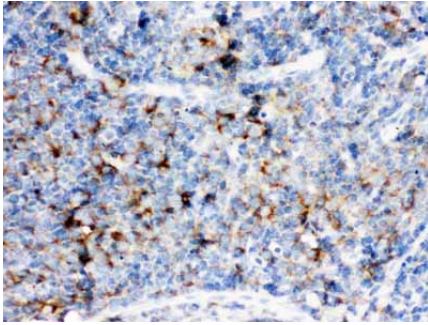
Images



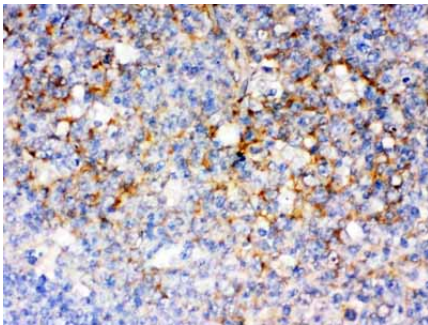
Western blot analysis of CD14 expression in rat brain extract (lane 1) and mouse liver extract (lane 2). CD14 at 50KD was detected using rabbit anti-CD14 Antigen Affinity purified polyclonal antibody(Catalog # ABO12533) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



CD14 was detected in paraffin-embedded sections of mouse lymphaden tissues using rabbit anti- CD14 Antigen Affinity purified polyclonal antibody (Catalog # ABO12533) at 1 µg/mL. The immunohistochemical section was developed using SABC method .



CD14 was detected in paraffin-embedded sections of rat lymphaden tissues using rabbit anti- CD14 Antigen Affinity purified polyclonal antibody (Catalog # ABO12533) at 1 µg/mL. The immunohistochemical section was developed using SABC method .



CD14 was detected in paraffin-embedded sections of human tonsil tissues using rabbit anti- CD14 Antigen Affinity purified polyclonal antibody (Catalog # ABO12533) at 1 µg/mL. The immunohistochemical section was developed using SABC method .

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