

Anti-CD14 Picoband Antibody
Catalog # ABO12533**Specification**

Anti-CD14 Picoband Antibody - Product Information

Application	WB, IHC
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.

Anti-CD14 Picoband Antibody - 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 MW KDa

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. .

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 reconstitution, 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.

Anti-CD14 Picoband Antibody - 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: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.

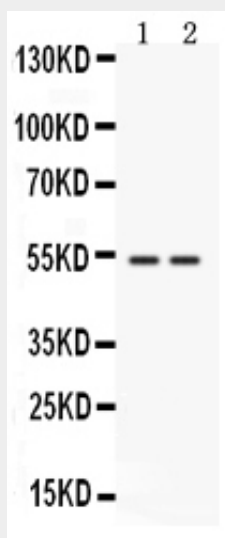
Anti-CD14 Picoband Antibody - Protocols

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

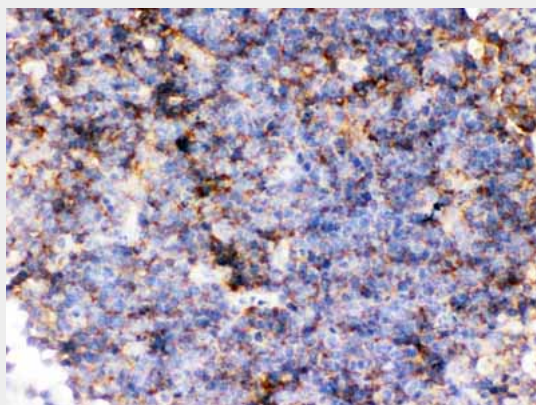
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

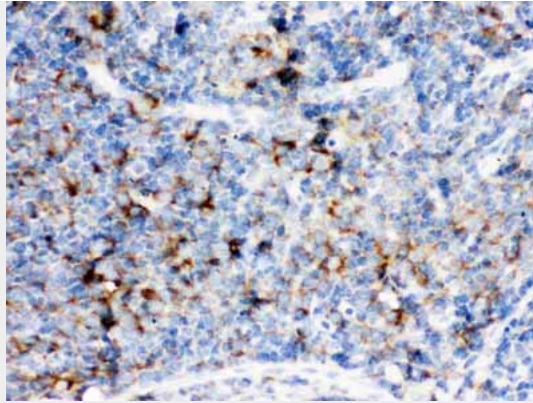
Anti-CD14 Picoband Antibody - Images



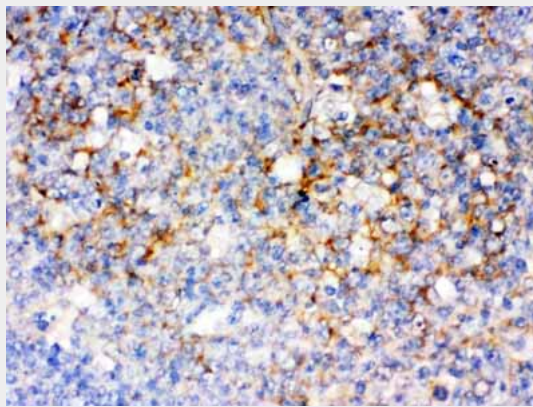
Western blot analysis of CD14 expression in rat brain extract (lane 1) and mouse liver extract (lane 2). CD14 at 50KD was detected using rabbit anti-CD14 Antigen Affinity purified polyclonal antibody (Catalog # ABO12533) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .



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

Anti-CD14 Picoband Antibody - 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.