10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 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.**

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: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.

Anti-CD14 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides

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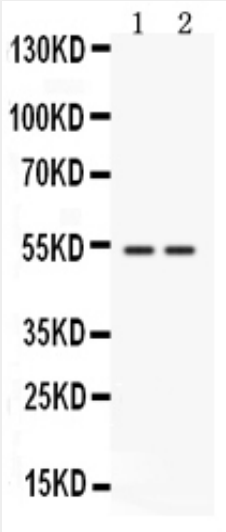
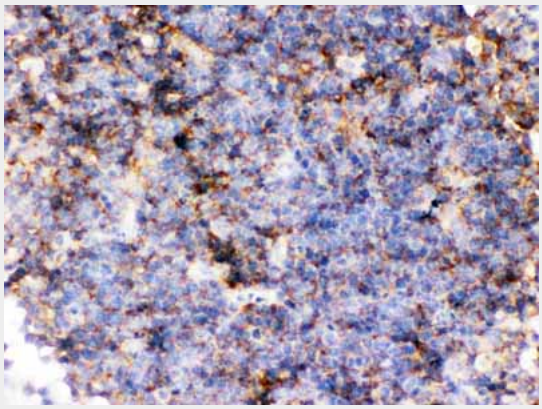
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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) at0.5 Î¼g/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 ??g/mL. The immunohistochemical section was developed using SABC method .

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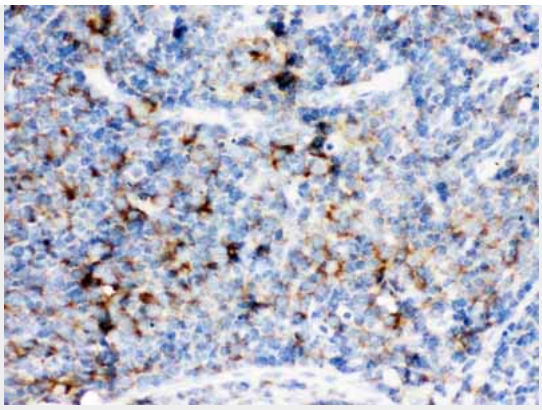
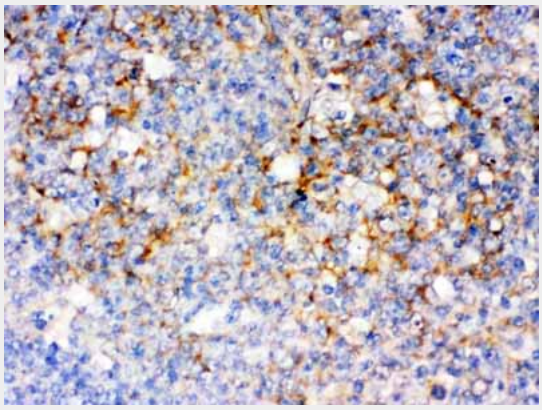


CD14 was detected in paraffin-embedded sections of rat lymphaden tissues using rabbit anti-CD14 Antigen Affinity purified polyclonal antibody (Catalog # ABO12533) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



CD14 was detected in paraffin-embedded sections of human tonsil tissues using rabbit anti- CD14 Antigen Affinity purified polyclonal antibody (Catalog # ABO12533) at 1 Î¼g/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.