

Rabbit CD14 Polyclonal Antibody | anti-CD14 antibody

Anti-CD14 Picoband Antibody

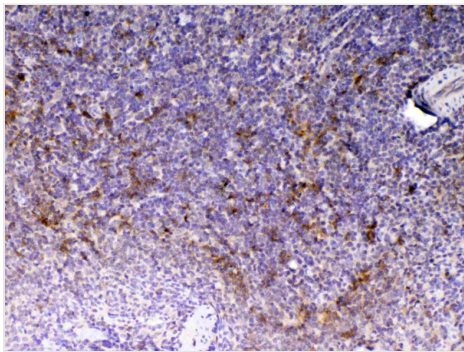
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124550	Rabbit	Mouse, Rat No cross reactivity with other proteins.	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

CD14; Polyclonal Antibody; Anti-CD14 Picoband Antibody; Monocyte differentiation antigen CD14; Myeloid cell-specific leucine-rich glycoprotein; Cd14; anti-CD14 antibody

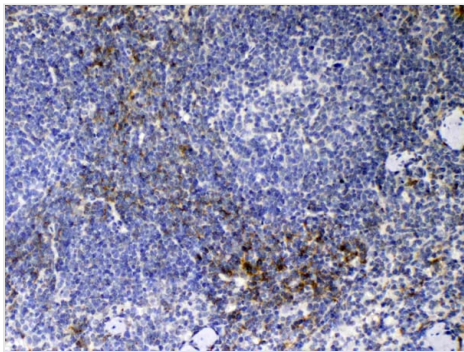
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified
Form/Format	Lyophilized
Concentration	Add 0.2ml of distilled water will yield a concentration of 500ug/ml. (varies by lot)
Sequence Length	366
Applicable Applications for anti-CD14 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Immunogen	E Coli-derived mouse CD14 recombinant protein (Position: S16-A260).
Subcellular Localization	Cell membrane
Tissue Specificity	Detected on peritoneal macrophages (at protein level) (PubMed: 8612135). Cell surface expression detected in lung alveolar macrophages, dendritic macrophages and lung macrophages (at protein level) (PubMed: 19362712).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



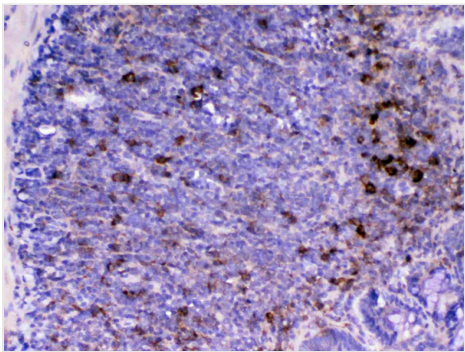
IHC (Immunohistochemistry)

Figure 4. IHC analysis of CD14 using anti-CD14 antibody (AAA124550).CD14 was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CD14 Antibody (AAA124550) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



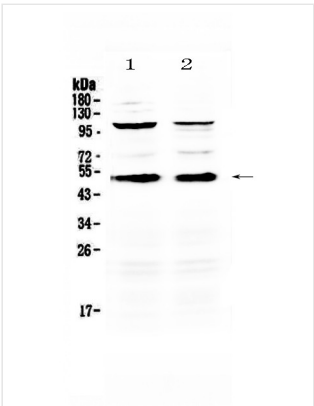
IHC (Immunohistochemistry)

Figure 2. IHC analysis of CD14 using anti-CD14 antibody (AAA124550).CD14 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CD14 Antibody (AAA124550) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of CD14 using anti-CD14 antibody (AAA124550).CD14 was detected in paraffin-embedded section of rat lymphaden tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CD14 Antibody (AAA124550) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of CD14 using anti-CD14 antibody (AAA124550).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: mouse thymus tissue lysates,Lane 2: mouse spleen tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD14 antigen affinity purified polyclonal antibody at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD14 at approximately 50KD. The expected band size for CD14 is at 40KD.

ADDITIONAL INFORMATION

Related Product Information for anti-CD14 antibody	Description: 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. Protein Function: Coreceptor for bacterial lipopolysaccharide. 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: 16148141). Acts via MyD88, TIRAP and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed: 8612135, PubMed: 15895089). 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 (By similarity). Acts as an accessory receptor for M.tuberculosis lipoproteins LprA, LprG and LpqH, in conjunction with coreceptors TLR2 and TLR1. The lipoproteins act as agonists to modulate antigen presenting cell functions in response to the pathogen (PubMed: 19362712). Binds electronegative LDL (LDL(-)) and mediates the cytokine release induced by LDL(-) (By similarity).
Product Categories/Family for anti-CD14 antibody	Immunology; Cell Type Markers; Myeloid Cells; Stem Cells; Hematopoietic Progenitors; Hematopoietic Stem Cells; Human Lineage Negative; Mesenchymal Stem Cells; negative markers; Myeloid; monocytic lineage; Neutrophil Lineage; Immunology; Innate Immunity; T

NCBI AND UNIPROT INFORMATION

NCBI GI #	6753332
NCBI GeneID	12475
NCBI Accession #	NP_033971.1
NCBI GenBank Nucleotide #	NM_009841.4
UniProt Accession #	P10810
Molecular Weight	39,204 Da
NCBI Official Full Name	monocyte differentiation antigen CD14
NCBI Official Synonym Full Names	CD14 antigen
NCBI Official Symbol	Cd14
NCBI Protein Information	monocyte differentiation antigen CD14
UniProt Protein Name	Monocyte differentiation antigen CD14
UniProt Gene Name	Cd14

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/cd14-antibody-western-blot-immunohistochemistry-elisa/124550>