

Datasheet for 600-401-R04**CD14 Antibody****Overview**

Description:	Anti-CD14 (RABBIT) Antibody - 600-401-R04
Item No.:	600-401-R04
Size:	100 µg
Applications:	WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	CD14, Cluster of differentiation 14, 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. By in situ hybridization and study of somatic cell hybrid DNA that the gene is located at bands 5q23-q31. 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. This antibody is suitable for researchers interested in stem cell research.
Synonyms:	Myeloid cell-specific leucine-rich glycoprotein, CD_antigen=CD14
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Cd14
Reactivity:	Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	CD14 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of mouse CD14.

Purity/Specificity: Anti-CD14 antibody is directed against mouse CD14 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from mouse based on 100% homology for the immunogen sequence. Cross reactivity with CD14 from other sources has not been determined.

Relevant Links:

- [UniProtKB - P10810](#)
- [GeneID - 12475](#)
- [NCBI - NP_033971.1](#)

Application Details

Tested Applications: WB

Application Note: Anti-CD14 is tested for Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~39.2 kDa corresponding to the appropriate cell lysate or extract.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

WB: 0.5µg/mL

Formulation

Physical State: Lyophilized

Concentration: 0.5 mg/mL by UV absorbance at 280 nm

Buffer: 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃

Preservative: 0.05mg Thimerosal

Stabilizer: 5mg BSA

Reconstitution Volume: 100 µL

Reconstitution Buffer: Restore with deionized water (or equivalent)

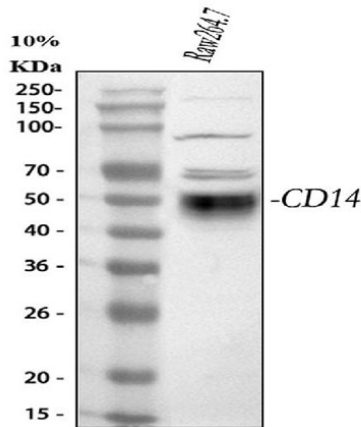
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western blot analysis of CD14 using anti-CD14 antibody. 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 30µg of sample under reducing conditions. Lane 1: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with affinity purified rabbit anti-CD14 antigen polyclonal antibody at 0.5 µg/mL overnight at 4°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 1:5000 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 50 kDa. The expected band size for CD14 is at 39 kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.