

Datasheet for ABIN5692819

**anti-CD44 antibody (AA 21-259)****5** Images**11** Publications[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	CD44
Binding Specificity:	AA 21-259
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CD44 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

## Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human CD44 recombinant protein (Position: Q21-H259).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for CD44 detection. Tested with WB, IHC-P, Direct ELISA in Human, Mouse, Rat.

## Target Details

Target:	CD44
Alternative Name:	CD44 ( <a href="#">CD44 Products</a> )
Background:	Synonyms: CD44 antigen, CDw44, Epican, Extracellular matrix receptor III, ECMR-III, GP90

## Target Details

lymphocyte homing/adhesion receptor, HUTCH-I, Heparan sulfate proteoglycan, Hermes antigen, Hyaluronate receptor, Phagocytic glycoprotein 1, PGP-1, Phagocytic glycoprotein I, PGP-I, CD44, CD44, LHR, MDU2, MDU3, MIC4

Tissue Specificity: Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells.

Background: CD44 is also known as LHR or MC56. The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This protein participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms, however, the full length nature of some of these variants has not been determined. Alternative splicing is the basis for the structural and functional diversity of this protein, and may be related to tumor metastasis.

UniProt:	<a href="#">P16070</a>
Pathways:	<a href="#">Glycosaminoglycan Metabolic Process</a> , <a href="#">Autophagy</a> , <a href="#">Negative Regulation of intrinsic apoptotic Signaling</a>

## Application Details

Application Notes:	Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P). Application Details: Western blot, 0.1-0.5 µg/mL Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL Direct ELISA, 0.1-0.5 µg/mL
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Restrictions:	For Research Use only
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## Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg NaN <sub>3</sub> .
Preservative:	Sodium azide

## Handling

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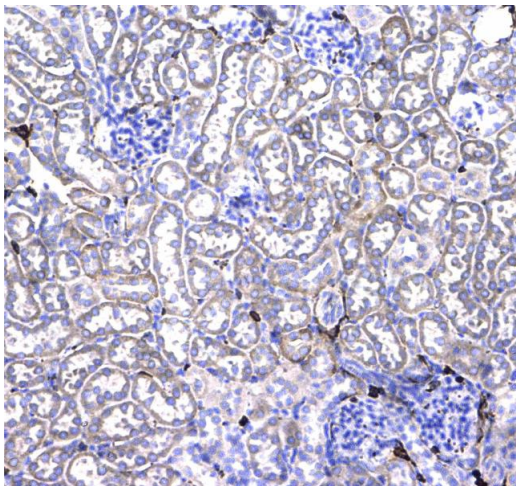
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

## Publications

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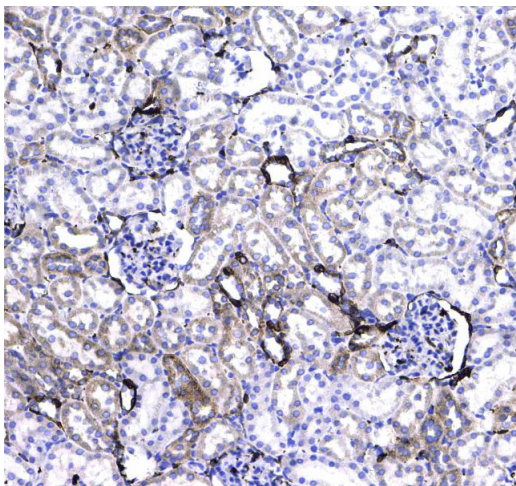
Product cited in:	<p>Wen, Xie, Zhou, Fan, Yu, Chen, Fu, Yan, Guo, Lyu, Kuang, Chai: "The role of combining medroxyprogesterone 17-acetate with human menopausal gonadotropin in mouse ovarian follicular development." in: <b>Scientific reports</b>, Vol. 8, Issue 1, pp. 4439, (2018) (<a href="#">PubMed</a>).</p> <p>Zhang, Yan, Liu, Li, Zhang, Pang, Hu, Zhao, Xie, Zhou, Wang, Xie: "Smad3-related miRNAs regulated oncogenic TRIB2 promoter activity to effectively suppress lung adenocarcinoma growth." in: <b>Cell death &amp; disease</b>, Vol. 7, Issue 12, pp. e2528, (2017) (<a href="#">PubMed</a>).</p> <p>Ding, Chang, Niu, Dai, Geng, Li, Guo, Xu: "Overexpression of transcription factor Foxa2 and Hnf1 <math>\alpha</math> induced rat bone mesenchymal stem cells into hepatocytes." in: <b>Cytotechnology</b>, Vol. 68, Issue 5, pp. 2037-47, (2016) (<a href="#">PubMed</a>).</p> <p>Zhang, Shang, Hao, Zheng, Li, Liang, Cui, Liu: "Effects of human umbilical cord mesenchymal stem cell transplantation combined with minimally invasive hematoma aspiration on intracerebral hemorrhage in rats." in: <b>American journal of translational research</b>, Vol. 7, Issue 11, pp. 2176-86, (2016) (<a href="#">PubMed</a>).</p> <p>Zhang, Wang, Dai, Cai, Zhan, Gang, Hu, Xia, Zhang: "Lentivirus-mediated PLC<math>\gamma</math>1 gene short-hairpin RNA suppresses tumor growth and metastasis of human gastric adenocarcinoma." in: <b>Oncotarget</b>, Vol. 7, Issue 7, pp. 8043-54, (2016) (<a href="#">PubMed</a>).</p>
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There are more publications referencing this product on: [Product page](#)



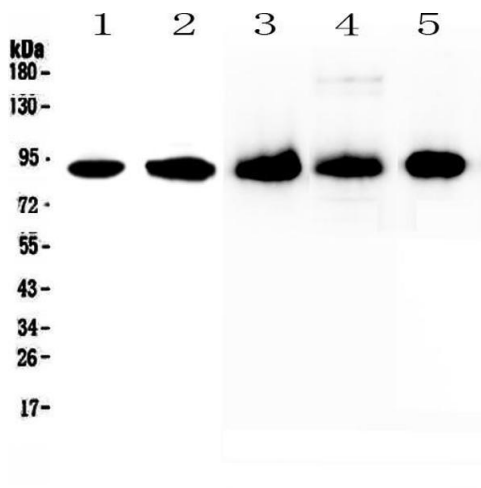
#### Immunohistochemistry

**Image 1.** IHC analysis of CD44 using anti-CD44 antibody . CD44 was detected in paraffin-embedded section of mouse kidney 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 1µg/ml rabbit anti-CD44 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



#### Immunohistochemistry

**Image 2.** IHC analysis of CD44 using anti-CD44 antibody . CD44 was detected in paraffin-embedded section of rat kidney 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 1µg/ml rabbit anti-CD44 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



#### Western Blotting

**Image 3.** Western blot analysis of CD44 using anti-CD44 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 50ug of sample under reducing conditions. Lane 1: human Hela cell lysate, Lane 2: human 22RV1 cell lysate, Lane 3: rat spleen tissue lysate, Lane 4: rat thymus tissue lysate, Lane 5: mouse spleen tissue lysate. 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-CD44 antigen affinity purified polyclonal antibody (Catalog # ) 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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD44 at approximately 88KD. The expected band size for CD44 is at 82KD.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5692819.