

Datasheet for 600-401-GT4S**CD44 Antibody****Overview**

Description:	Anti-CD44 (RABBIT) Antibody - 600-401-GT4S
Item No.:	600-401-GT4S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	CD44 was designed, produced, and validated as part of the Joy Cappel Young Investigator Award (JCYIA). CD44 is a receptor for hyaluronic acid (HA), an integral component of the extracellular matrix. CD44 mediates cell-cell and cell-matrix interactions through its affinity for HA, and can also interact with ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). The multiple protein isoforms are encoded by a single gene by alternative splicing and are further modified by a range of post-translational modifications. CD44 function is controlled by these posttranslational modifications. The major physiological role of CD44 is to maintain organ and tissue structure via cell-cell and cell-matrix adhesion, but certain variant isoforms can also mediate lymphocyte activation and homing, and the presentation of chemical factors and hormones. CD44 participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. CD44 is a multi-structural and multi-functional cell surface molecule involved in cell proliferation, cell differentiation, cell migration, angiogenesis, presentation of cytokines, chemokines, and growth factors to the corresponding receptors, and docking of proteases at the cell membrane, as well as in signaling for cell survival. All these biological properties are essential to the physiological activities of normal cells, but they are also associated with the pathologic activities of cancer cells. CD44, particularly its variants, may be useful as a diagnostic or prognostic marker of malignancy and, in at least some human cancers, it may be a potential target for cancer therapy.
Synonyms:	rabbit anti-CD44 Antibody, CD 44, CD-44 antibody, CDw44, HCAM, homing cell adhesion molecule, lymphocyte homing receptor, LHR, ECM-III, Epican, Extracellular matrix receptor III, ECMR-III, GP90 lymphocyte homing/adhesion receptor, HUTCH-I, HUTCH-1, Heparan sulfate proteoglycan, Hermes antigen, Hyaluronate receptor, Pgp-1, phagocytic glycoprotein-1, Phagocytic glycoprotein 1, PGP1, Phagocytic glycoprotein I, MDU2, MDU3, MIC4
Host Species:	Rabbit

Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CD44
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-CD44 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide near the c-terminal region of human CD44.
Purity/Specificity:	Anti-CD44 Antibody is directed against human CD44 protein. CD44 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis used to suggest reactivity with this protein from human based on 100% homology for the immunizing sequence.
Relevant Links:	• UniProtKB - P16070 • NCBI - NP_000601.3 • GeneID - 960

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-CD44 Antibody has been tested for use in ELISA and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 81.5 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:50,000
WB:	1.0 ug/ml

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative:	0.01% (w/v) Sodium Azide
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Stabilizer:	None
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Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
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Expiration:	Expiration date is one (1) year from date of receipt.
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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.