

PRODUCT INFORMATION



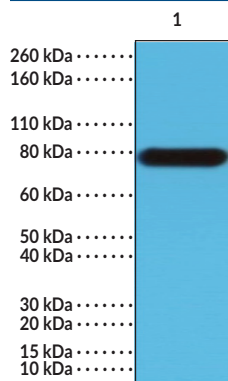
CD44 Extracellular Domain Rabbit Monoclonal Antibody (Clone RM264)

Item No. 32214

Overview and Properties

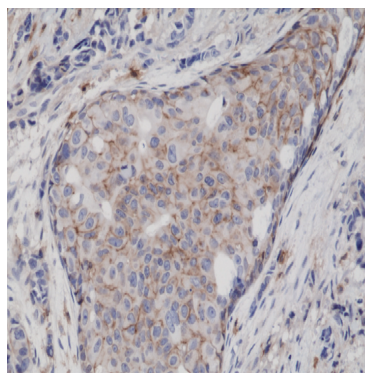
Contents:	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	CDw44, Extracellular Matrix Receptor III, Heparin Sulfate Proteoglycan, HUTCH-1, Hyaluronate Receptor, PGP-1
Immunogen:	Peptide from the extracellular domain of human CD44
Cross Reactivity:	(+) CD44
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM264
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:1,000-1:5,000 for IHC and 1:1,000-1:2,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Lane 1: HeLa cell lysates

WB of HeLa cell lysates using CD44 Extracellular Domain Rabbit Monoclonal Antibody (Clone RM264) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human breast cancer tissue using CD44 Extracellular Domain Rabbit Monoclonal Antibody (Clone RM264) at a dilution of 1:5,000.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

CD44 is a type I transmembrane glycoprotein and cell adhesion molecule belonging to the cartilage link protein family with roles in cell-cell and cell-matrix interactions, signal transduction, and cell migration.¹⁻³ It is composed of an N-terminal extracellular globular domain with a link domain that binds to the extracellular matrix component hyaluronan (HA) and other glycosaminoglycans, a membrane-proximal stem structure, a transmembrane domain, and a cytoplasmic domain that facilitates interactions with cytoskeleton-associated proteins.^{1,4} The stem structure of CD44 can be modified *via* inclusion of variant exons between amino acid residues 222 and 223, resulting in several variant (CD44v) isoforms with the shortest and most prevalent isoform, known as the standard isoform (CD44s) or hematopoietic isoform (CD44H), having no exon insertions at this position.^{1,5,6} CD44 is expressed in a variety of cell types, including endothelial and epithelial cells, fibroblasts, and leukocytes.² Binding of CD44 to HA is induced in T cells and monocytes upon antigen recognition and activation by inflammatory stimuli, respectively.⁷ The interaction between CD44 and HA mediates T cell rolling and recruitment of leukocytes to sites of inflammation. Several CD44 isoforms are expressed in tumor cells, including CD44v6, the overexpression of which is associated with tumor differentiation and lymph node metastasis in patients with non-small cell lung cancer (NSCLC).^{8,9} Cayman's CD44 Extracellular Domain Rabbit Monoclonal Antibody (Clone RM264) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

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