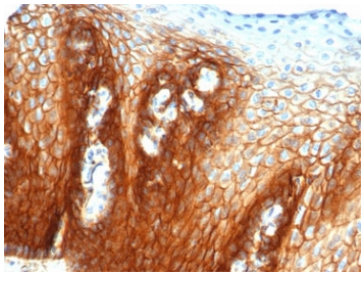
CD44 Antibody / Epithelial Cell Adhesion Marker Antibody [clone rHCAM/6449] (V8829)

Catalog No.	Formulation	Size
V8829-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8829-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8829SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

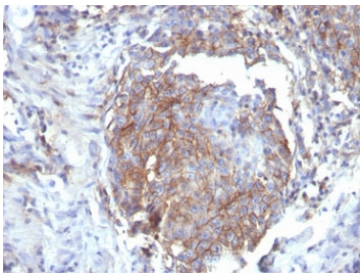
Recombinant | MOUSE MONOCLONAL

Bulk quote request

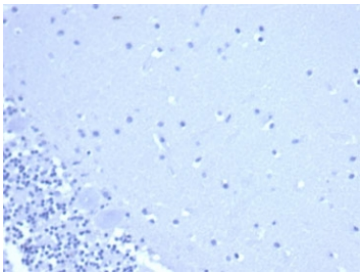
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2a, kappa
Clone Name	rHCAM/6449
Purity	Protein A/G affinity
UniProt	P16070
Localization	Cell Surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This CD44 Antibody / Epithelial Cell Adhesion Marker Antibody is available for research use only.



CD44 Antibody Esophagus Tissue IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human esophagus tissue using Epithelial Cell Adhesion Marker Antibody clone rHCAM/6449. Strong membranous HRP-DAB brown staining is observed in stratified squamous epithelial cells, outlining cell borders and highlighting organized epithelial layering consistent with CD44-mediated cell adhesion. The staining pattern demonstrates cohesive epithelial architecture and supports its use for evaluating cell-cell interaction, membrane localization, and structural integrity in esophageal epithelium. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before testing.



CD44 Antibody Breast Tissue IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human breast tissue using Epithelial Cell Adhesion Marker Antibody clone rHCAM/6449. Membranous HRP-DAB brown staining is observed in epithelial cell populations, outlining cell borders and highlighting cell surface localization consistent with CD44-mediated adhesion. The staining pattern demonstrates cohesive epithelial organization with defined cellular clusters and supports its use for evaluating cell-cell interaction, membrane integrity, and structural arrangement in breast tissue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before testing.



CD44 Antibody Brain IHC Negative Control: IHC staining of FFPE human brain tissue using CD44 antibody (clone rHCAM/6449) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

CD44 antigen (CD44), also known as homing cell adhesion molecule (HCAM), is a transmembrane glycoprotein that functions as a receptor for hyaluronic acid and mediates cell adhesion, migration, and extracellular matrix interactions. It is prominently expressed on epithelial cells, where it contributes to cell-cell communication, membrane organization, and maintenance of tissue structure. CD44 Antibody / Epithelial Cell Adhesion Marker Antibody is designed to detect CD44 expression in formalin-fixed, paraffin-embedded tissues, enabling immunohistochemistry-based evaluation of membrane-associated staining patterns and epithelial tissue architecture. This positioning makes it particularly suited for analyzing epithelial cell borders, layering, and adhesion-dependent organization in structured tissues.

CD44 antibody, also referred to as HCAM antibody or Hermes antigen antibody, recognizes a cell surface glycoprotein involved in adhesion and extracellular matrix engagement. In epithelial tissues such as esophagus and breast, CD44 expression is strongly associated with membrane-localized cell-cell interaction and preservation of cohesive tissue architecture. Recombinant mouse monoclonal antibody clone rHCAM/6449 is designed to detect CD44 in these epithelial contexts, supporting consistent visualization of cell surface localization and structural organization across tissue sections.

Functionally, CD44 mediates binding to hyaluronic acid and other extracellular matrix components, supporting stable adhesion between neighboring epithelial cells and interaction with the surrounding stromal environment. These interactions contribute to maintenance of epithelial integrity, polarity, and spatial organization. In immunohistochemistry applications, CD44 staining typically presents as strong membranous HRP-DAB signal outlining individual cell borders, allowing clear visualization of epithelial sheets, layered organization, and cohesive cell populations. This CD44 Antibody is particularly suited for interpreting epithelial morphology, cell junction continuity, and adhesion-related structural features in both normal and tumor-associated tissues.

CD44 expression in esophagus and breast tissue highlights its role in epithelial surface organization and tissue architecture. Variations in staining intensity and distribution may reflect differences in epithelial differentiation state, cell density, and local microenvironmental conditions. Membrane-dominant staining patterns provide a reliable marker for assessing epithelial integrity and organization across diverse tissue types. Detection of CD44 in these contexts supports comparative analysis of epithelial structure and cell surface interactions in histological samples.

Structurally, CD44 consists of an extracellular ligand-binding domain, a transmembrane segment, and a cytoplasmic tail involved in intracellular signaling and cytoskeletal interactions. Alternative splicing generates multiple isoforms that retain core functional properties while contributing to biological diversity. An antibody targeting CD44 is suitable for detecting membrane-associated expression and studying epithelial cell adhesion, tissue organization, and cell surface interactions

in a wide range of research applications.

This CD44 antibody is part of a broader CD44 antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the CD44 Antibody / Epithelial Cell Adhesion Marker Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human CD44 protein was used as the immunogen for the CD44 antibody.

Storage

Aliquot the CD44 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD44 antibody, HCAM antibody, CD44 epithelial adhesion antibody, CD44 antigen antibody, Hermes antigen antibody