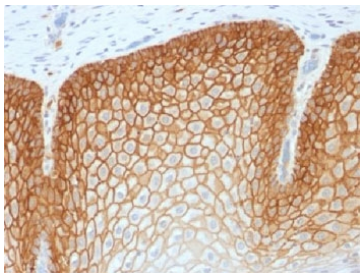
CD44v4 Antibody for IHC Epithelial Organization / Cell Adhesion Marker Antibody [clone CD44v4/1700R] (V7247)

Catalog No.	Formulation	Size
V7247-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7247-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7247SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7247IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CD44v4/1700R
Purity	Protein A affinity chromatography
UniProt	P16070
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD44v4 Antibody for IHC Epithelial Organization / Cell Adhesion Marker Antibody is available for research use only.



CD44v4 Antibody for IHC Cervical Squamous Cell Carcinoma. Immunohistochemistry analysis of CD44 variant 4 / CD44 expression in FFPE human cervical squamous cell carcinoma using recombinant rabbit monoclonal antibody clone CD44v4/1700R. Strong, continuous membranous HRP-DAB brown staining is observed in malignant squamous epithelial cells, clearly outlining cell borders and preserving epithelial layering consistent with CD44v4-associated cell adhesion and tissue organization. The staining pattern highlights cohesive tumor architecture and supports its use as a marker of epithelial integrity and structural organization in squamous cell carcinoma. Heat induced epitope retrieval was performed by steaming tissue sections in pH 9 10mM Tris with 1mM EDTA buffer for 20 min before testing.

Description

CD44 antigen (CD44) is a transmembrane glycoprotein of the CD44 family that functions as a receptor for hyaluronic acid and mediates cell adhesion, migration, and extracellular matrix interactions. It is localized primarily to the cell membrane of epithelial and hematopoietic cells, where it plays a central role in maintaining tissue architecture and coordinating cell-cell communication. CD44v4 Antibody for IHC Epithelial Organization is designed to detect the variant 4-containing isoform of CD44 in formalin-fixed, paraffin-embedded tissues, enabling immunohistochemistry-based evaluation of epithelial structure and adhesion-dependent tissue organization. CD44v4 is expressed in epithelial tissues where coordinated cell adhesion and membrane integrity support stable tissue architecture.

CD44 antibody, also referred to as CD44 antigen antibody, CD44 variant 4 antibody, CD44v4 IHC antibody, or Hermes antigen antibody, recognizes alternatively spliced isoforms that confer distinct biological functions. CD44v4 is associated with maintenance of epithelial cohesion, contributing to stable cell-cell contacts and continuous membrane-associated adhesion across epithelial layers. Recombinant rabbit monoclonal antibody clone CD44v4/1700R is designed to detect CD44v4 in tissue sections with high specificity, enabling clear visualization of epithelial organization and intercellular boundaries in structured tissues.

Functionally, CD44v4 contributes to epithelial tissue integrity by supporting adhesion between neighboring cells and anchoring epithelial cells to the extracellular matrix. This role is essential for maintaining organized epithelial sheets, preserving polarity, and sustaining barrier function. In immunohistochemistry applications, CD44v4 staining presents as strong, continuous membranous HRP-DAB signal outlining individual cell borders, allowing precise visualization of epithelial layering, cell morphology, and junctional organization. This CD44v4 Antibody for IHC Epithelial Organization is particularly suited for examining epithelial cohesion, structural continuity, and organization in both normal tissues and well-differentiated epithelial tumors.

CD44v4 expression is observed in epithelial tissues where it supports maintenance of tissue architecture and cellular alignment. In carcinoma samples, its expression can highlight malignant epithelial cells while preserving recognizable structural features, allowing evaluation of tumor organization and differentiation status without emphasizing invasive behavior. Detection of CD44v4 in these tissues provides insight into epithelial structure and the maintenance of cell adhesion in both physiological and disease contexts.

Structurally, CD44 is encoded on chromosome 11p13 and consists of an extracellular ligand-binding domain, a transmembrane segment, and a cytoplasmic tail involved in intracellular signaling and cytoskeletal interactions. The variant 4 region is generated through alternative splicing within the extracellular domain, producing isoforms with specialized roles in adhesion and tissue organization. CD44 isoforms are differentially expressed depending on tissue type and biological context, with CD44v4 commonly associated with epithelial cohesion and structural maintenance. An antibody targeting CD44v4 is suitable for detecting variant-specific expression in epithelial tissues and related research applications involving cell adhesion and tissue organization.

For additional CD44 research, explore our HCAM Antibody 156-3C11, a well-established monoclonal antibody with over 200 publications supporting its use in studies of cell adhesion, migration, and cancer biology.

Application Notes

Titering of the recombinant CD44v4 Antibody for IHC Epithelial Organization / Cell Adhesion Marker Antibody may be required for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

An amino acid sequence from the variant 4 domain of CD44 was used as the immunogen for the recombinant CD44v4 antibody.

Storage

Store the CD44v4 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD44v4 antibody, CD44 variant 4 antibody, CD44 splice variant antibody, CD44 cell adhesion marker antibody, Hermes antigen variant antibody

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