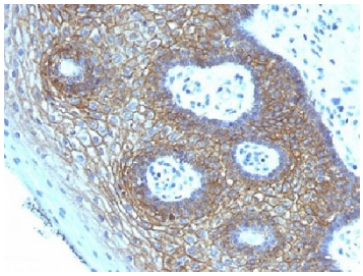
CD44v4 Antibody for IHC Squamous Cell Carcinoma / SCC Marker Antibody [clone CD44v4/1219] (V3282)

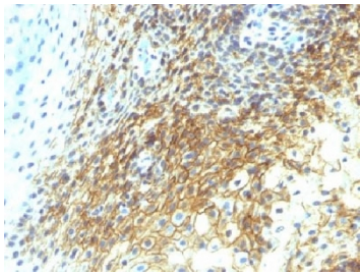
Catalog No.	Formulation	Size
V3282-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3282-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3282SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

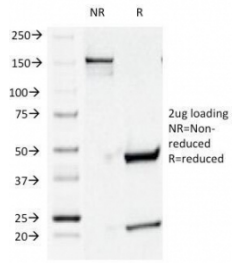
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CD44v4/1219
Purity	Protein G affinity chromatography
UniProt	P16070
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD44v4 Antibody for IHC Squamous Cell Carcinoma / SCC 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 mouse monoclonal antibody clone CD44v4/1219. Strong membranous HRP-DAB brown staining is observed in malignant squamous epithelial cells forming tumor nests, clearly outlining cell borders and preserving epithelial organization consistent with CD44v4-associated squamous differentiation and carcinoma identity. The staining pattern highlights cohesive tumor architecture and supports its use as a marker of epithelial lineage and structural integrity in squamous cell carcinoma. Heat induced epitope retrieval was performed by steaming tissue sections in pH 9 10mM Tris with 1mM EDTA buffer for 10-20 min.



CD44v4 Antibody for IHC Tongue Squamous Cell Carcinoma. Immunohistochemistry analysis of CD44 variant 4 / CD44 expression in FFPE human tongue squamous cell carcinoma using mouse monoclonal antibody clone CD44v4/1219. Membranous HRP-DAB brown staining is observed in malignant squamous epithelial cells, outlining tumor cell borders and highlighting areas of cohesive and less organized growth consistent with CD44v4-associated squamous differentiation and carcinoma identity. The staining pattern supports its use as a marker of epithelial lineage and tumor architecture in squamous cell carcinoma of the tongue. Heat induced epitope retrieval was performed by steaming tissue sections in pH 9 10mM Tris with 1mM EDTA buffer for 10-20 min.



SDS-PAGE Analysis of Purified, BSA-Free CD44v4 Antibody (clone CD44v4/1219). Confirmation of Integrity and Purity of the Antibody.

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 contributes to maintenance of tissue architecture and intercellular communication. CD44v4 Antibody for IHC Squamous Cell Carcinoma is designed to detect the variant 4-containing isoform of CD44 in formalin-fixed, paraffin-embedded tissues, enabling immunohistochemistry-based evaluation of squamous epithelial tumors and their structural differentiation. CD44v4 expression is associated with epithelial cohesion and is commonly retained in squamous-derived malignancies where tumor cells preserve characteristic stratified organization.

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 linked to maintenance of squamous epithelial identity through membrane-associated adhesion and preservation of organized cell-cell contacts. In stratified squamous epithelium, expression is typically observed in basal and suprabasal layers, reflecting regions of active proliferation and differentiation. Mouse monoclonal antibody clone CD44v4/1219 is designed to detect CD44v4 in tissue sections, supporting identification of squamous tumor cell populations and evaluation of epithelial lineage characteristics in carcinoma samples. A recombinant form of this clone is also available, enabling complementary approaches to CD44v4 detection across related antibody formats.

Functionally, CD44v4 contributes to structural cohesion within stratified squamous epithelium by supporting adhesion between neighboring cells and maintaining organized epithelial layering. In squamous cell carcinoma, this pattern of membranous expression is frequently preserved within malignant epithelial nests and sheets, allowing clear visualization of tumor architecture and differentiation state. In immunohistochemistry applications, CD44v4 staining presents as strong membranous HRP-DAB signal outlining tumor cell borders and maintaining recognizable squamous organization. This CD44v4 Antibody for IHC Squamous Cell Carcinoma is particularly suited for identifying squamous epithelial character and supporting classification of SCC in tissue sections.

CD44v4 expression is observed in squamous malignancies including cervical squamous cell carcinoma and tongue squamous cell carcinoma, where it highlights malignant epithelial cells and supports assessment of tumor morphology. Its distribution in these tissues provides a useful marker for evaluating epithelial lineage and distinguishing tumors with preserved squamous differentiation from less organized malignancies. Detection of CD44v4 in SCC therefore supports studies of tumor architecture, epithelial identity, and tissue-based classification in squamous neoplasia.

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 epithelial 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 squamous epithelial tumors and related research applications involving epithelial differentiation and tumor classification.

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 CD44v4 Antibody for IHC Squamous Cell Carcinoma / SCC Marker Antibody may be required for optimal performance.

Immunogen

An amino acid sequence from the variant 4 domain of CD44 was used as the immunogen for the 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 squamous marker antibody, Hermes antigen variant antibody

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