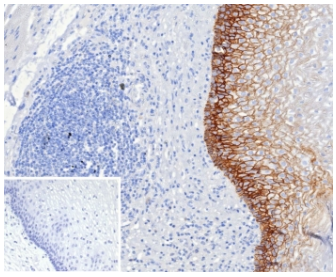
CD44v6 Antibody for IHC Esophageal Epithelium / Epithelial Differentiation Marker Antibody [clone CD44V6/2496] (V3775)

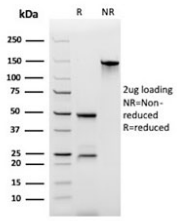
Catalog No.	Formulation	Size
V3775-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3775-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3775SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CD44V6/2496
Purity	Protein G affinity chromatography
UniProt	P16070
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This CD44v6 Antibody for IHC Esophageal Epithelium / Epithelial Differentiation Marker Antibody is available for research use only.



CD44v6 Antibody for IHC Esophageal Epithelium. Immunohistochemistry analysis of CD44 variant 6 / CD44 expression in FFPE human esophagus tissue using mouse monoclonal antibody clone CD44V6/2496. Strong, continuous membranous HRP-DAB brown staining is observed across stratified squamous epithelial layers, clearly outlining cell borders and highlighting epithelial stratification consistent with CD44v6-associated differentiation and tissue organization. The staining pattern emphasizes uniform epithelial architecture and supports its use as a marker of epithelial maturation in esophageal 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 at RT before testing.



SDS-PAGE analysis of purified, BSA-free CD44v6 antibody (clone CD44V6/2496) as confirmation of integrity and purity.

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 regulating cell-cell communication. CD44v6 Antibody for IHC Esophageal Epithelium is designed to detect the variant 6-containing isoform of CD44 in formalin-fixed, paraffin-embedded tissues, enabling immunohistochemistry-based evaluation of epithelial differentiation and structural organization in stratified squamous tissues. CD44v6 is prominently expressed across epithelial cell layers where coordinated differentiation and maturation define tissue architecture.

CD44 antibody, also referred to as CD44 antigen antibody, CD44 variant 6 antibody, CD44v6 IHC antibody, or Hermes antigen antibody, recognizes alternatively spliced isoforms that confer distinct biological functions. CD44v6 expression is closely associated with epithelial differentiation states, with strong membranous localization observed across basal, suprabasal, and intermediate layers of stratified squamous epithelium. Mouse monoclonal antibody clone CD44V6/2496 is designed to detect CD44v6 in tissue sections, enabling high-resolution visualization of epithelial morphology and differentiation patterns within esophageal mucosa.

Functionally, CD44v6 contributes to the regulation of epithelial cell maturation by supporting adhesion and maintaining spatial organization across differentiating cell layers. In stratified squamous epithelium, its expression reflects a coordinated differentiation gradient extending from proliferative basal cells to more differentiated superficial layers. In immunohistochemistry applications, CD44v6 staining presents as strong, crisp membranous HRP-DAB signal outlining individual cell borders, allowing precise visualization of epithelial stratification, cellular morphology, and differentiation states. This CD44v6 Antibody for IHC Esophageal Epithelium is particularly suited for examining epithelial maturation, layer organization, and structural clarity in normal tissues.

In addition to its role in normal epithelial biology, CD44v6 expression provides a sensitive readout of changes in epithelial differentiation that may occur in pathological conditions. Alterations in staining intensity, continuity, or distribution can reflect disruptions in epithelial maturation and tissue organization, supporting comparative analysis between normal and diseased states. The clear delineation of epithelial layers provided by CD44v6 staining makes it especially useful for evaluating subtle changes in tissue structure and differentiation patterns.

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 6 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 CD44v6 commonly enriched in stratified epithelial tissues. An antibody targeting CD44v6 is suitable for detecting variant-specific expression in esophageal epithelium and related research applications involving epithelial differentiation and tissue organization.

This CD44v6 antibody is part of a broader CD44 antibody panel offered by NSJ Bioreagents.

Application Notes

Titering of the CD44v6 Antibody for IHC Esophageal Epithelium / Epithelial Differentiation Marker Antibody may be required for optimal performance.

Immunogen

An amino acid sequence from the variant 6 domain of CD44 was used as the immunogen for the CD44v6 antibody.

Storage

Store the CD44v6 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD44v6 antibody, CD44 variant 6 antibody, CD44 splice variant antibody, CD44 epithelial differentiation marker antibody, Hermes antigen variant antibody