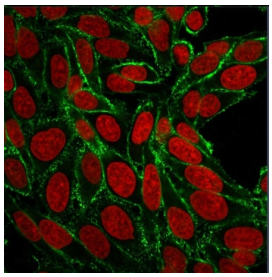
HCAM Antibody Clone 156-3C11 / CD44 Tumor Biology Research Antibody [clone 156-3C11] (V2068)

Catalog No.	Formulation	Size
V2068-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2068-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2068SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2068IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

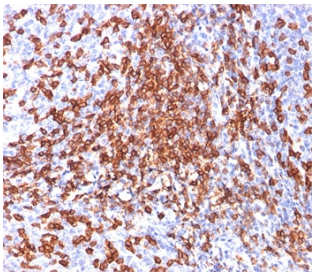
Citations (8)

Bulk quote request

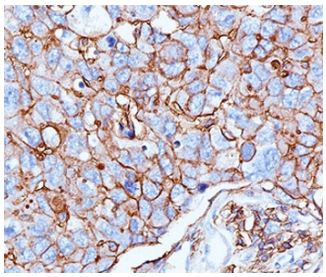
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	156-3C11
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	960
Localization	Cell surface, cytoplasmic
Applications	Flow Cytometry : 2-4ug/10^6 cells Immunofluorescence : 2-4ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This HCAM Antibody Clone 156-3C11 / CD44 Tumor Biology Research Antibody is available for research use only.



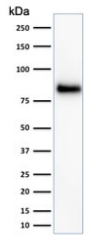
HCAM Antibody HeLa Cell IF. Immunofluorescence analysis of HCAM / CD44 expression in human HeLa cells using mouse monoclonal antibody clone 156-3C11 (green) with Reddot nuclear stain (red). Membrane-associated fluorescence is observed outlining cell borders, with additional punctate signal consistent with cell surface and peripheral distribution of HCAM/CD44. The staining pattern highlights heterogeneous expression across cells and supports its use for visualizing cell surface localization and HCAM/CD44-mediated cellular interactions in cultured human cells.



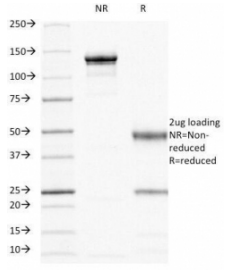
HCAM Antibody Tonsil IHC. Immunohistochemistry analysis of HCAM / CD44 expression in FFPE human tonsil tissue using mouse monoclonal antibody clone 156-3C11. Membranous HRP-DAB brown staining is observed in lymphoid cells within the tonsillar tissue, highlighting widespread cell surface expression consistent with HCAM/CD44 localization on immune cell populations. The staining pattern demonstrates dense distribution of positive cells within lymphoid regions and supports its use for evaluating HCAM/CD44 expression and cellular organization in lymphoid 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.



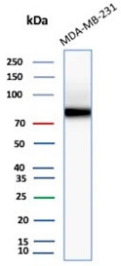
HCAM Antibody Breast Cancer IHC. Immunohistochemistry analysis of HCAM / CD44 expression in FFPE human breast cancer tissue using mouse monoclonal antibody clone 156-3C11. Membranous HRP-DAB brown staining is observed in tumor epithelial cells, outlining cell borders and highlighting cell surface localization consistent with HCAM/CD44 expression. The staining pattern demonstrates heterogeneous intensity across tumor cells and supports its use for evaluating HCAM/CD44 distribution, tumor cell organization, and microenvironment-associated expression in breast carcinoma 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.



HCAM Antibody Human HeLa Cell Line WB. Western blot analysis of HCAM / CD44 expression in human HeLa cell lysate using mouse monoclonal antibody clone 156-3C11. A band is detected at approximately 80 kDa, consistent with the predicted molecular weight of HCAM/CD44 (HCAM / CD44 antigen). CD44 is a glycosylated transmembrane protein, and the observed band reflects the core protein with potential variation in apparent molecular weight due to glycosylation of the extracellular domain. The detected signal supports HCAM/CD44 expression in HeLa cells and is consistent with its role as a cell surface adhesion molecule.



SDS-PAGE analysis of purified, BSA-free HCAM antibody (clone 156-3C11) as confirmation of integrity and purity.



HCAM Antibody Human MDA-MB-231 Cell Line WB. Western blot analysis of HCAM / CD44 expression in human MDA-MB-231 cell lysate using mouse monoclonal antibody clone 156-3C11. A band is detected at approximately 80 kDa, consistent with the predicted molecular weight of HCAM/CD44 (HCAM / CD44 antigen). CD44 is a glycosylated transmembrane protein, and the observed band reflects the core protein with potential variation in apparent molecular weight due to glycosylation of the extracellular domain. The detected signal supports HCAM/CD44 expression in MDA-MB-231 cells, a breast cancer cell line known to express cell surface CD44.

Description

Homing cell adhesion molecule (HCAM), also known as CD44 antigen, is a transmembrane glycoprotein that functions as a receptor for hyaluronic acid and mediates cell adhesion, migration, and extracellular matrix interactions. It is expressed on the surface of epithelial cells, immune cells, and tumor cells, where it plays a central role in cell-cell communication and interaction with the surrounding microenvironment. HCAM Antibody Clone 156-3C11 / CD44 Tumor Biology Research Antibody is designed to detect HCAM/CD44 expression in formalin-fixed, paraffin-embedded tissues and other research samples, enabling immunohistochemistry-based evaluation of cell surface localization, tumor cell organization, and microenvironment-associated expression patterns in cancer research settings.

HCAM antibody, also referred to as CD44 antibody or Hermes antigen antibody, recognizes a cell surface glycoprotein involved in adhesion and extracellular matrix engagement. Clone 156-3C11 is a mouse monoclonal antibody that has been referenced in numerous peer-reviewed studies, particularly in tumor biology and cancer research. Its frequent use in these contexts supports its role as a well-established reagent for investigating HCAM/CD44 expression in malignant cells and their interaction with stromal and immune components within the tumor microenvironment.

Functionally, HCAM/CD44 mediates binding to hyaluronic acid and other extracellular matrix components, facilitating tumor cell adhesion, migration, and spatial organization within tissues. These interactions are especially relevant at the cell surface, where HCAM/CD44 supports communication between tumor cells and the surrounding extracellular matrix. In immunohistochemistry applications, staining typically presents as strong membranous HRP-DAB signal outlining tumor cell borders, reflecting its localization at the plasma membrane. This HCAM Antibody Clone 156-3C11 is particularly suited for examining tumor cell morphology, architectural organization, and microenvironmental interactions in carcinoma samples.

HCAM/CD44 expression is observed across a wide range of tumor types, where it contributes to cellular heterogeneity, organization of tumor cell clusters, and interaction with stromal elements. Variability in staining intensity and distribution may reflect differences in tumor differentiation state, cellular organization, and microenvironmental context. Detection of HCAM/CD44 therefore supports detailed evaluation of tumor biology, including cell surface interaction dynamics and structural organization within malignant tissues. The citation history of clone 156-3C11 further supports its use as a reliable and frequently utilized reagent in cancer-focused experimental systems.

Structurally, HCAM/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. Alternative splicing generates multiple CD44 isoforms that retain core functional properties while contributing to biological diversity. An antibody targeting HCAM/CD44 is suitable for detecting membrane-associated expression and studying cell surface interactions, tumor architecture, and microenvironmental communication in cancer biology and related research applications.

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

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the HCAM Antibody Clone 156-3C11 / CD44 Tumor Biology Research Antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. 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

Stimulated human leukocytes were used as the immunogen for this CD44 / HCAM antibody.

Storage

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

Alternate Names

HCAM antibody, CD44 antibody, HCAM 156-3C11 antibody, CD44 antigen antibody, Hermes antigen antibody

References (1)