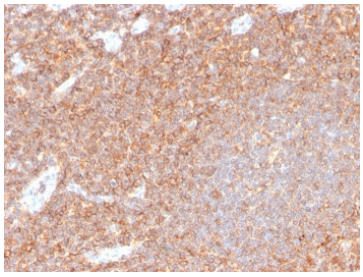
CD44 Antibody HCAM/4110R / Cell Surface Receptor Signaling Antibody [clone HCAM/4110R] (V8762)

Catalog No.	Formulation	Size
V8762-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8762-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8762SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

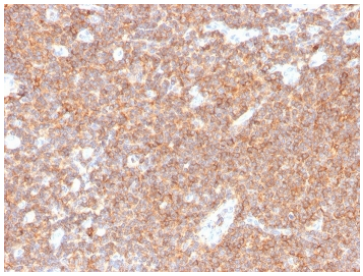
Recombinant RABBIT MONOCLONAL

Bulk quote request

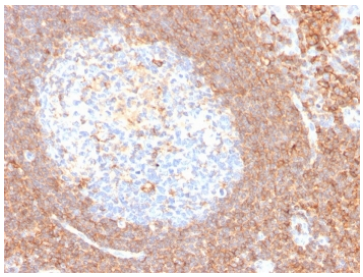
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	HCAM/4110R
Purity	Protein A affinity chromatography
UniProt	P16070
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This CD44 Antibody HCAM/4110R / Cell Surface Receptor Signaling Antibody is available for research use only.



CD44 Antibody HCAM/4110R Tonsil IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human tonsil tissue using Cell Surface Receptor Signaling Antibody clone HCAM/4110R. Membranous HRP-DAB brown staining is observed in dense lymphoid cell populations, highlighting cell surface localization consistent with receptor-associated signaling activity. The staining pattern demonstrates widespread distribution across lymphoid regions and supports its use for evaluating membrane-localized receptor expression and cell-environment signaling interactions in tonsil tissue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



CD44 Antibody Tonsil Tissue IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human tonsil tissue using Cell Surface Receptor Signaling Antibody clone HCAM/4110R. Strong membranous HRP-DAB brown staining is present in lymphoid cell populations, outlining cell borders and reflecting localization of CD44 at the plasma membrane. The staining pattern demonstrates uniform signal across densely packed immune cells and supports its use for assessing receptor distribution and membrane-associated signaling interfaces in lymphoid tissue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



CD44 Antibody Tonsil Lymphoid Region IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human tonsil tissue using Cell Surface Receptor Signaling Antibody clone HCAM/4110R. Membrane-associated HRP-DAB brown staining is observed throughout lymphoid compartments, with prominent signal in surrounding cell populations and comparatively reduced staining in germinal center regions. This distribution highlights spatial variation in CD44 expression and supports its use for evaluating receptor localization and microenvironment-associated signaling patterns within tonsil tissue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

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. In addition to its structural role, CD44 operates as a cell surface signaling receptor that integrates extracellular cues with intracellular pathways regulating cell behavior. CD44 Antibody HCAM/4110R / Cell Surface Receptor Signaling Antibody (clone HCAM/4110R) is designed to detect CD44 expression in formalin-fixed, paraffin-embedded tissues, enabling analysis of membrane localization and receptor-associated signaling activity within complex tissue environments.

CD44 antibody, also referred to as HCAM antibody or Hermes antigen antibody, recognizes a glycosylated cell surface receptor that participates in signaling processes linked to proliferation, survival, cytoskeletal remodeling, and cell-environment interaction. CD44 can associate with extracellular matrix components such as hyaluronic acid as well as co-receptors and intracellular signaling complexes, allowing it to function as a mediator of microenvironment-dependent signaling. Clone HCAM/4110R is a recombinant rabbit monoclonal antibody designed to detect CD44 in biologically relevant tissue contexts where receptor localization and signaling interfaces are critical.

Functionally, CD44 contributes to intracellular signaling through its cytoplasmic domain, which connects to cytoskeletal elements and signaling mediators. Engagement of CD44 at the cell surface can influence downstream pathways that regulate adhesion dynamics, cellular motility, and response to extracellular stimuli. In immunohistochemistry applications, CD44 staining typically presents as membranous HRP-DAB signal outlining cell borders, consistent with localization at signaling-active regions of the plasma membrane. This membrane-dominant pattern supports interpretation of CD44 as a receptor positioned at the interface between cells and their microenvironment. This CD44 Antibody clone HCAM/4110R is particularly suited for examining receptor localization, membrane-associated signaling domains, and spatial organization of signaling activity in tissue sections.

CD44 expression in lymphoid and epithelial tissues reflects its role in coordinating cellular responses to environmental signals. Variations in staining intensity and distribution may indicate differences in receptor density, activation state, or engagement with extracellular ligands and co-receptors. Detection of CD44 in these contexts supports studies of signal transduction, cell-environment interaction, and receptor-mediated regulation of cellular behavior across tissue types.

Structurally, CD44 consists of an extracellular ligand-binding domain, a transmembrane segment, and a cytoplasmic tail

that interacts with intracellular signaling and cytoskeletal proteins. Alternative splicing generates multiple isoforms, and glycosylation contributes to structural diversity and functional modulation. An antibody targeting CD44 is suitable for detecting membrane-associated expression and studying receptor signaling, cellular interaction, and microenvironmental response in a wide range of research applications.

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

Optimal dilution of the CD44 Antibody HCAM/4110R / Cell Surface Receptor Signaling Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 150-250 from the human protein was used as the immunogen for the recombinant CD44 antibody.

Storage

Store the CD44 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD44 antibody, HCAM antibody, CD44 signaling antibody, CD44 receptor antibody, Hermes antigen antibody

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