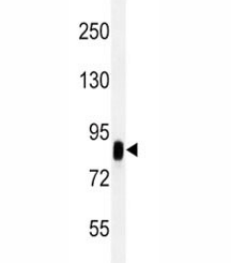
CD44 Antibody Hermes-3 / Leukocyte Marker Antibody [clone Hermes-3] (F40263)

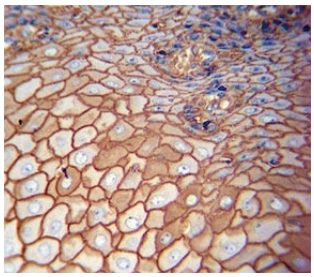
Catalog No.	Formulation	Size
F40263-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40263-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

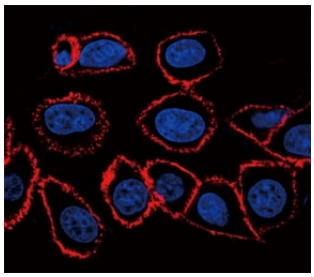
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	Hermes-3
Purity	Purified
UniProt	P16070
Localization	Cell surface, cytoplasmic
Applications	Western blot: 1:100-1:500 Immunohistochemistry (FFPE): 1:10-1:50 Immunofluorescence: 1:10-1:50 Flow cytometry: 1:10-1:50
Limitations	This CD44 Antibody Clone Hermes-3 / Leukocyte Marker Antibody is available for research use only.



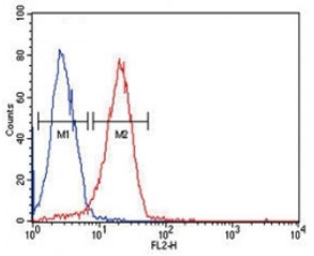
CD44 Antibody Hermes-3 Human Cell Line WB. Western blot analysis of CD44 / CD44 antigen expression in human HeLa cell lysate using mouse monoclonal antibody clone Hermes-3. A band is detected at approximately 80-95 kDa, consistent with the predicted molecular weight of CD44 (CD44 / CD44 antigen). CD44 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 CD44 expression in HeLa cells and is consistent with its role as a cell surface adhesion molecule.



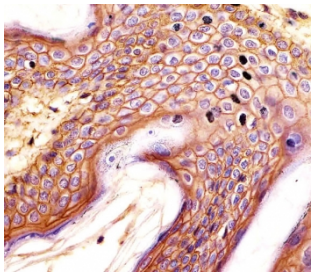
CD44 Antibody Hermes-3 Esophagus Carcinoma IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human esophagus carcinoma tissue using mouse monoclonal antibody clone Hermes-3. Strong membranous HRP-DAB brown staining is observed in malignant epithelial cells, outlining cell borders and highlighting cell surface localization consistent with CD44 expression. The staining pattern demonstrates cohesive tumor architecture and supports its use for evaluating epithelial organization and CD44-associated cell surface interactions in esophageal 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.



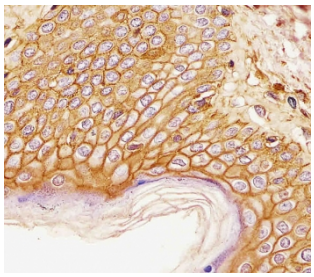
CD44 Antibody Hermes-3 HeLa Cell IF. Immunofluorescence analysis of CD44 / CD44 antigen expression in human HeLa cells using mouse monoclonal antibody clone Hermes-3 (red) with DAPI nuclear stain (blue). Strong membrane-associated fluorescence is observed outlining cell borders, highlighting cell surface localization consistent with CD44 expression. The staining pattern demonstrates clear cell perimeter labeling and supports its use for visualizing CD44-mediated cell surface interactions and cellular morphology in cultured human cells.



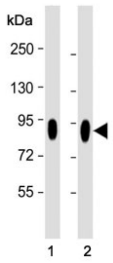
CD44 Antibody Hermes-3 HeLa Cell FACS. Flow cytometry analysis of CD44 / CD44 antigen expression in human HeLa cells using mouse monoclonal antibody clone Hermes-3. The right-shifted histogram (red) demonstrates increased fluorescence intensity compared to the negative control population (blue), indicating positive cell surface expression of CD44. The clear separation between populations supports its use for detecting and quantifying CD44-expressing cells and analyzing cell surface marker distribution in cultured human cells.



CD44 Antibody Hermes-3 Skin IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human skin tissue using mouse monoclonal antibody clone Hermes-3. Strong membranous HRP-DAB brown staining is observed in stratified squamous epithelial cells, outlining cell borders and highlighting organized epithelial layering consistent with CD44 expression. The staining pattern emphasizes cell surface localization within epidermal layers and supports its use for evaluating epithelial structure and CD44-associated cell adhesion in skin 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.



CD44 Antibody Hermes-3 Skin Tissue IHC. Immunohistochemistry analysis of CD44 / CD44 antigen expression in FFPE human skin tissue using mouse monoclonal antibody clone Hermes-3. Membranous HRP-DAB brown staining is observed throughout stratified squamous epithelial layers, clearly outlining cell borders and demonstrating organized epithelial architecture consistent with CD44 expression. The staining pattern highlights uniform cell surface localization and supports its use for evaluating epithelial structure and CD44-associated cell adhesion in skin 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.



CD44 Antibody Hermes-3 HeLa and HUVEC Human Cell Line WB. Western blot analysis of CD44 / CD44 antigen expression in human cell lysates using mouse monoclonal antibody clone Hermes-3. Lane 1: HeLa cell lysate, Lane 2: HUVEC cell lysate. A band is detected at approximately 80-95 kDa, consistent with the predicted molecular weight of CD44 (CD44 / 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 CD44 expression in both epithelial-derived and endothelial cell types, consistent with its role as a broadly expressed cell surface adhesion molecule.

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. It is widely expressed on immune cells, including T lymphocytes, B lymphocytes, monocytes, and other leukocyte populations, where it plays a central role in cell trafficking, adhesion, and interaction with the extracellular environment. CD44 Antibody Hermes-3 / Leukocyte Marker Antibody is designed to detect CD44 expression in formalin-fixed, paraffin-embedded tissues and other research samples, enabling immunohistochemistry-based evaluation of immune cell distribution, cell surface localization, and lymphoid tissue organization.

CD44 antibody, also referred to as HCAM antibody or Hermes antigen antibody, recognizes a cell surface glycoprotein involved in leukocyte adhesion and migration. Clone Hermes-3 is a mouse monoclonal antibody that has been historically associated with studies of immune cell biology, particularly in the context of lymphocyte activation, trafficking, and homing. Its established use in these areas supports its role as a well-characterized reagent for detecting CD44 expression in immune cell populations and for examining lymphoid tissue architecture.

Functionally, CD44 mediates binding to hyaluronic acid and other extracellular matrix components, facilitating leukocyte adhesion to endothelial surfaces, migration through tissues, and localization within sites of immune activity. These interactions are critical for immune surveillance and coordinated movement of immune cells between circulation and tissues. In immunohistochemistry applications, staining typically presents as strong membranous HRP-DAB signal on lymphoid cells, outlining individual cell borders and highlighting dense immune cell populations within tissue. This CD44 Antibody Clone Hermes-3 is particularly suited for examining immune cell distribution, lymphoid tissue organization, and cell surface interactions within immune microenvironments.

CD44 expression is prominently observed in lymphoid tissues such as tonsil, lymph node, and spleen, where it marks dense populations of leukocytes and supports evaluation of tissue architecture and immune cell localization. Staining patterns often reflect compartmental organization within lymphoid structures, including regions enriched for lymphocytes and antigen-presenting cells. Detection of CD44 in these contexts provides insight into immune cell positioning, activation states, and interaction with surrounding stromal components. The historical use of clone Hermes-3 in immune-focused studies further supports its application in research involving leukocyte biology and lymphoid tissue analysis.

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. Alternative splicing generates multiple CD44 isoforms that retain core functional properties while contributing to biological diversity. An antibody targeting CD44 is suitable for detecting membrane-associated expression and studying immune cell adhesion, trafficking, and tissue organization 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

Titration of the CD44 Antibody Hermes-3 / Leukocyte Marker Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This CD44 antibody was produced from a mouse immunized with recombinant protein.

Storage

Aliquot the CD44 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

HCAM antibody, CD44 antibody, Hermes-3 antibody, CD44 leukocyte marker antibody, CD44 antigen antibody

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