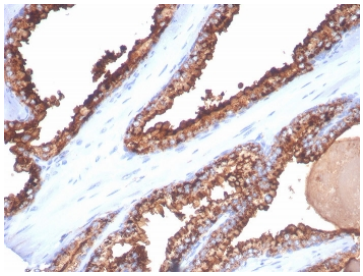
CD26 Antibody / DPP4 Antibody - Broad T Cell Activation and Enzyme Marker [clone DPP4/7415] (V4920)

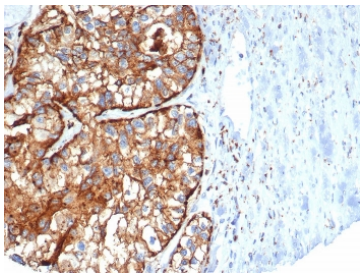
Catalog No.	Formulation	Size
V4920-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4920-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4920SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

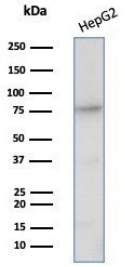
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	DPP4/7415
Purity	Protein A/G affinity
UniProt	P27487
Localization	Cell Surface
Applications	Western blot: 1-2ug/ml (2) Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD26 Antibody / DPP4 Antibody - Broad T Cell Activation and Enzyme Marker is available for research use only.



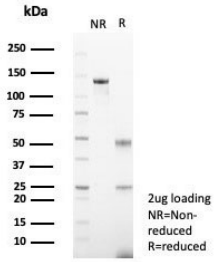
CD26 Antibody Prostate Cancer IHC. Immunohistochemistry analysis of FFPE human prostate cancer tissue stained with a mouse monoclonal CD26 antibody detecting Dipeptidyl peptidase 4 (DPP4). The antibody clone DPP4/7415 shows prominent membranous and cytoplasmic staining in tumor epithelial cells, consistent with the surface-associated enzyme activity of CD26 and its role as a T cell activation antigen within the tumor microenvironment. Additional staining in stromal regions supports the involvement of DPP4 in epithelial-stromal and immune cell interactions. Hematoxylin counterstain highlights nuclei in blue. HIER: boil tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.



CD26 Antibody Kidney Cancer IHC. Immunohistochemistry analysis of FFPE human kidney cancer tissue stained with a mouse monoclonal CD26 antibody recognizing Dipeptidyl peptidase 4 (DPP4). The antibody clone DPP4/7415 demonstrates strong membranous and cytoplasmic staining in tumor epithelial cells, highlighting CD26 as a membrane-associated enzymatic marker with known roles in peptide processing and immune-related signaling. The staining pattern supports the utility of this antibody for studying DPP4 expression in tumor cells and its relevance to T cell activation pathways within the tumor microenvironment. Hematoxylin counterstain highlights nuclei in blue. HIER: boil tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min and allow to cool before testing.



CD26 Antibody HepG2 WB. Western blot analysis of human HepG2 cell lysate using a mouse monoclonal CD26 antibody detecting Dipeptidyl peptidase 4 (DPP4), clone DPP4/7415. A band is detected at approximately 90-110 kDa, consistent with the predicted molecular weight of glycosylated DPP4. This migration pattern reflects the heavily glycosylated nature of CD26 as a functional membrane-associated serine exopeptidase involved in peptide cleavage and immune signaling regulation. Detection in HepG2 cells aligns with the known expression of DPP4 in hepatic and epithelial-derived systems.



SDS-PAGE analysis of purified, BSA-free CD26 antibody (clone DPP4/7415) as confirmation of integrity and purity.

Description

Dipeptidyl peptidase 4 (DPP4), also known as CD26, is a type II transmembrane glycoprotein and serine exopeptidase that is expressed on the cell surface and can also exist in a soluble form. CD26 Antibody, clone DPP4/7415, is a mouse monoclonal antibody that recognizes this widely studied protein across immune, epithelial, endothelial, and stromal cell populations.

CD26 is a multifunctional protein that combines enzymatic activity with roles in cell signaling and adhesion. As a member of the prolyl oligopeptidase family, DPP4 cleaves N-terminal dipeptides from peptides containing proline or alanine in the penultimate position. This enzymatic function regulates the activity of numerous bioactive peptides, including chemokines, incretin hormones, and inflammatory mediators, linking DPP4 to immune regulation, metabolic control, and tissue homeostasis. CD26 Antibody is therefore frequently used to examine both membrane-associated enzyme expression and broader biological processes involving peptide signaling.

In the immune system, CD26 is well established as a T cell activation antigen, with increased expression on activated T lymphocytes. It participates in costimulatory signaling and can interact with molecules such as adenosine deaminase and CD45, contributing to T cell proliferation and cytokine production. CD26 is also present on subsets of B cells, natural killer cells, and antigen-presenting cells, reflecting its broader role in immune communication. These properties make DPP4 a relevant marker for studying immune cell activation and interactions within normal and diseased tissues.

Beyond immune cells, DPP4 is expressed in a wide range of tissues, including kidney, liver, intestine, lung, and vascular endothelium, where it is typically localized to the cell membrane and sometimes detected in the cytoplasm. In epithelial tissues, CD26 expression is often associated with differentiated cell states and surface enzyme activity. In tumor biology, DPP4 expression has been reported in multiple cancer types, where it may be involved in cell adhesion, extracellular

matrix interaction, and modulation of the tumor microenvironment. Its presence in both tumor cells and surrounding stromal or immune compartments highlights its value as a marker for studying tissue architecture and cellular interactions.

The protein contains a short cytoplasmic tail, a single-pass transmembrane domain, and a large extracellular catalytic domain responsible for its enzymatic activity and protein-protein interactions. CD26 can form homodimers on the cell surface, a configuration associated with its functional activity. In addition to its membrane-bound form, soluble DPP4 can be released into circulation, where it retains enzymatic function and contributes to systemic peptide regulation. Together, these structural and functional characteristics support the use of a CD26 Antibody for investigating DPP4 expression across diverse biological contexts involving immune activation, epithelial biology, and enzyme-mediated signaling.

This CD26 antibody is part of a broader CD antibody panel offered by NSJ Bioreagents.

Application Notes

1. Optimal dilution of the CD26 Antibody / DPP4 Antibody - Broad T Cell Activation and Enzyme Marker should be determined by the researcher.

2. In Western blotting, this mAb reacts with only glycosylated CD26, but not with the deglycosylated form. It does not prevent ADA binding to CD26.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the CD26 antibody.

Storage

Aliquot the CD26 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD26 antibody, DPP4 antibody, Dipeptidyl peptidase 4 antibody, ADCP2 antibody, T cell activation antigen CD26 antibody, clone DPP4/7415 antibody

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