

Product datasheet

Anti-CD26 antibody [11D7] ab114033

[1 References](#) [4 Images](#)

Overview

Product name	Anti-CD26 antibody [11D7]
Description	Mouse monoclonal [11D7] to CD26
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length Human CD26 produced in HEK293T cells (NP_001926)
Positive control	IHC-P: Liver tissue Flow Cyt: Hela cells WB: Transfected HEK293T cell lysate ICC/IF: Transfected COS7 cells

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 48% PBS, 50% Glycerol, 1% BSA
Purity	IgG fraction
Purification notes	Purified from mouse ascites fluids by affinity chromatography
Clonality	Monoclonal
Clone number	11D7
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab114033** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500. Predicted molecular weight: 88 kDa.
IHC-P		1/50.

Application	Abreviews	Notes
Flow Cyt		1/100. ab170190 -Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		1/100.

Target

Function

Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC. Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion. In association with FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM. May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation. When overexpressed, enhanced cell proliferation, a process inhibited by GPC3. Acts also as a serine exopeptidase with a dipeptidyl peptidase activity that regulates various physiological processes by cleaving peptides in the circulation, including many chemokines, mitogenic growth factors, neuropeptides and peptide hormones. Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline.

Tissue specificity

Expressed specifically in lymphatic vessels but not in blood vessels in the skin, small intestine, esophagus, ovary, breast and prostate glands. Not detected in lymphatic vessels in the lung, kidney, uterus, liver and stomach (at protein level). Expressed in the poorly differentiated crypt cells of the small intestine as well as in the mature villous cells. Expressed at very low levels in the colon.

Sequence similarities

Belongs to the peptidase S9B family. DPPIV subfamily.

Domain

The extracellular cysteine-rich region is necessary for association with collagen, dimer formation and optimal dipeptidyl peptidase activity.

Post-translational modifications

The soluble form (Dipeptidyl peptidase 4 soluble form also named SDPP) derives from the membrane form (Dipeptidyl peptidase 4 membrane form also named MDPP) by proteolytic processing.

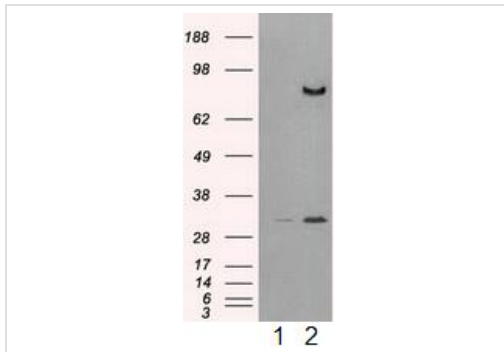
N- and O-Glycosylated.

Phosphorylated. Mannose 6-phosphate residues in the carbohydrate moiety are necessary for interaction with IGF2R in activated T-cells. Mannose 6-phosphorylation is induced during T-cell activation.

Cellular localization

Cell membrane. Apical cell membrane. Cell projection > invadopodium membrane. Cell projection > lamellipodium membrane. Cell junction. Membrane raft. Translocated to the apical membrane through the concerted action of N- and O-Glycans and its association with lipid microdomains containing cholesterol and sphingolipids. Redistributed to membrane rafts in T-cell in a interleukin-12-dependent activation. Its interaction with CAV1 is necessary for its translocation to membrane rafts. Colocalized with PTPRC in membrane rafts. Colocalized with FAP in invadopodia and lamellipodia of migratory activated endothelial cells in collagenous matrix. Colocalized with FAP on endothelial cells of capillary-like microvessels but not large vessels within invasive breast ductal carcinoma. Colocalized with ADA at the cell junction in lymphocyte-epithelial cell adhesion. Colocalized with IGF2R in internalized cytoplasmic vesicles adjacent to the cell surface and Secreted. Detected in the serum and the seminal fluid.

Images



Western blot - Anti-CD26 antibody [11D7]
(ab114033)

All lanes : Anti-CD26 antibody [11D7]
(ab114033) at 1/500 dilution

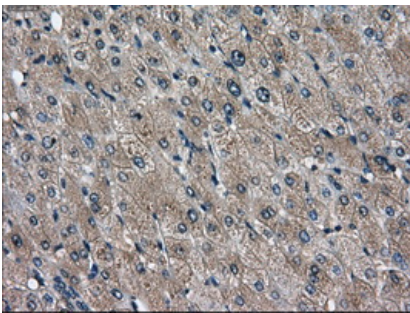
Lane 1 : HEK293T cells were transfected with
the pCMV6-ENTRY control cDNA for 48 hrs
and lysed

Lane 2 : HEK293T cells were transfected with
the pCMV6-ENTRY DPP4 cDNA for 48 hrs
and lysed

Lysates/proteins at 5 µg per lane.

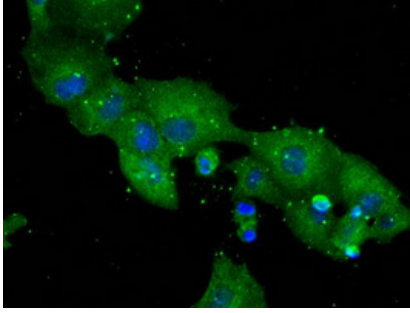
Predicted band size : 88 kDa

HEK293T cell lysates were generated from
transient transfection of the cDNA clone
(RC209466)



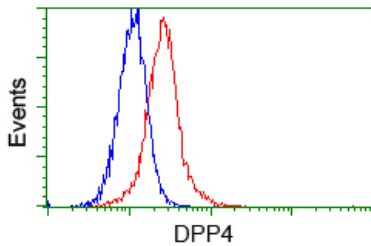
Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-CD26 antibody [11D7]
(ab114033)

Immunohistochemical staining of paraffin
embedded liver tissue using ab114033 at
1/50



Immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY DPP4, using ab114033 at 1/100

Immunocytochemistry/ Immunofluorescence - Anti-CD26 antibody [11D7] (ab114033)



Flow cytometric analysis of Hela cells, using ab114033 at 1/100 (Red) compared to a nonspecific negative control antibody (Blue)

Flow Cytometry - Anti-CD26 antibody [11D7] (ab114033)

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