

Anti-CD26/DPP4 Antibody
Catalog # ABO12266**Specification**

Anti-CD26/DPP4 Antibody - Product Information

Application	WB
Primary Accession	P27487
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Dipeptidyl peptidase 4(DPP4) detection. Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD26/DPP4 Antibody - Additional Information

Gene ID 1803

Other Names

Dipeptidyl peptidase 4, 3.4.14.5, ADABP, Adenosine deaminase complexing protein 2, ADCP-2, Dipeptidyl peptidase IV, DPP IV, T-cell activation antigen CD26, TP103, CD26, Dipeptidyl peptidase 4 membrane form, Dipeptidyl peptidase IV membrane form, Dipeptidyl peptidase 4 soluble form, Dipeptidyl peptidase IV soluble form, DPP4, ADCP2, CD26

Calculated MW

88279 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Dipeptidyl peptidase 4 soluble form: Secreted. Detected in the serum and the seminal fluid.

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. .

Protein Name

Dipeptidyl peptidase 4

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CD26 (731-761aa QAMWYTDHGHGASSTAHQHIYTHMSHFQK), different from the related mouse and rat sequences by three amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the peptidase S9B family. DPPIV subfamily.

Anti-CD26/DPP4 Antibody - Protein Information

Name DPP4 ([HGNC:3009](#))

Synonyms ADCP2, CD26

Function

Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation (PubMed: [10951221](http://www.uniprot.org/citations/10951221), PubMed: [10900005](http://www.uniprot.org/citations/10900005), PubMed: [11772392](http://www.uniprot.org/citations/11772392), PubMed: [17287217](http://www.uniprot.org/citations/17287217)). Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC (PubMed: [10951221](http://www.uniprot.org/citations/10951221), PubMed: [10900005](http://www.uniprot.org/citations/10900005), PubMed: [11772392](http://www.uniprot.org/citations/11772392), PubMed: [14691230](http://www.uniprot.org/citations/14691230)). Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner (PubMed: [17287217](http://www.uniprot.org/citations/17287217)). Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion (PubMed: [11772392](http://www.uniprot.org/citations/11772392)). 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 (PubMed: [16651416](http://www.uniprot.org/citations/16651416), PubMed: [10593948](http://www.uniprot.org/citations/10593948)). May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation (PubMed: [18708048](http://www.uniprot.org/citations/18708048)). When overexpressed, enhanced cell proliferation, a process inhibited by GPC3 (PubMed: [17549790](http://www.uniprot.org/citations/17549790)). 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 such as brain natriuretic peptide 32 (PubMed: [16254193](http://www.uniprot.org/citations/16254193), PubMed: [10570924](http://www.uniprot.org/citations/10570924)). Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that

the penultimate residue is proline (PubMed:10593948).

Cellular Location

[Dipeptidyl peptidase 4 soluble form]: Secreted Note=Detected in the serum and the seminal fluid

Tissue Location

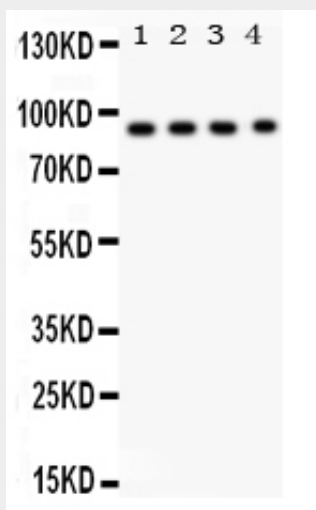
Expressed specifically in lymphatic vessels but not in blood vessels in the skin, small intestine, esophagus, ovary, breast and prostate glands. Not detected in lymphatic vessels in the lung, kidney, uterus, liver and stomach (at protein level). Expressed in the poorly differentiated crypt cells of the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

Anti-CD26/DPP4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CD26/DPP4 Antibody - Images



Anti- CD26 Picoband antibody, ABO12266, Western blotting All lanes: Anti CD26 (ABO12266) at 0.5ug/ml Lane 1: Rat Liver Tissue Lysate at 50ug Lane 2: 22RV1 Whole Cell Lysate at 40ug Lane 3: HEPG2 Whole Cell Lysate at 40ug Lane 4: SMMC Whole Cell Lysate at 40ug Predicted bind size: 88KD Observed bind size: 88KD

Anti-CD26/DPP4 Antibody - Background

Dipeptidyl peptidase-4 (DPP4), also known as CD26 (cluster of differentiation 26) is a protein that, in humans, is encoded by the DPP4 gene. The protein encoded by the DPP4 gene is an antigenic enzyme expressed on the surface of most cell types and is associated with immune regulation,

signal transduction and apoptosis. Also, it is an intrinsic membrane glycoprotein and a serine exopeptidase that cleaves X-proline dipeptides from the N-terminus of polypeptides. DPP4 plays a major role in glucose metabolism. It is responsible for the degradation of incretins such as GLP-1. Furthermore, it appears to work as a suppressor in the development of cancer and tumours.