

DPPIV (Human) Antibody
Goat Polyclonal Antibody
Catalog # ABV11243**Specification**

DPPIV (Human) Antibody - Product Information

Application	IF, WB
Primary Accession	P27487
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Isotype	Goat IgG
Calculated MW	88279

DPPIV (Human) Antibody - Additional Information**Gene ID** 1803

Positive Control	Western Blot: Human PMBCs, IHC, ICC: Human PMBCs
Application & Usage	WB: 0.2 µg/ml, ICC: 5-15 µg/ml, IHC: 5-15 µg/ml

Other Names

DPP4, DPP-4, ADABP, ADCP2, ADCP-2, CD26, CD-26, DPPIV, DPPIV, TP103, TP-103

Target/Specificity

DPPIV

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

0.2 mg/ml in PBS

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

DPPIV (Human) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

DPPIV (Human) 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) target="_blank">10951221, PubMed: [10900005](http://www.uniprot.org/citations/10900005) target="_blank">10900005, PubMed: [11772392](http://www.uniprot.org/citations/11772392) target="_blank">11772392, PubMed: [17287217](http://www.uniprot.org/citations/17287217) target="_blank">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) target="_blank">10951221, PubMed: [10900005](http://www.uniprot.org/citations/10900005) target="_blank">10900005, PubMed: [11772392](http://www.uniprot.org/citations/11772392) target="_blank">11772392, PubMed: [14691230](http://www.uniprot.org/citations/14691230) target="_blank">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) target="_blank">17287217). Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion (PubMed: [11772392](http://www.uniprot.org/citations/11772392) target="_blank">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) target="_blank">16651416, PubMed: [10593948](http://www.uniprot.org/citations/10593948) target="_blank">10593948). May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation (PubMed: [18708048](http://www.uniprot.org/citations/18708048) target="_blank">18708048). When overexpressed, enhanced cell proliferation, a process inhibited by GPC3 (PubMed: [17549790](http://www.uniprot.org/citations/17549790) target="_blank">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) target="_blank">16254193, PubMed: [10570924](http://www.uniprot.org/citations/10570924) target="_blank">10570924). Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline (PubMed: [10593948](http://www.uniprot.org/citations/10593948) target="_blank">10593948).

Cellular Location

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

Tissue Location

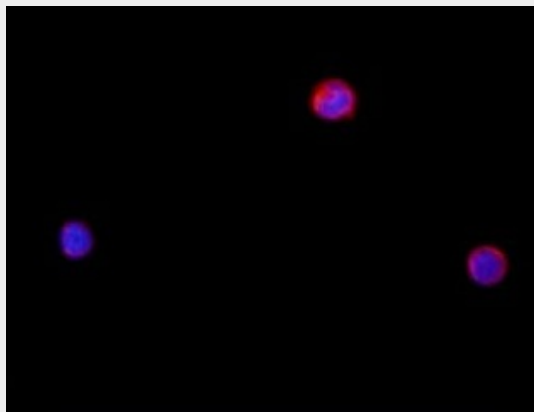
Expressed specifically in lymphatic vessels but not in blood vessels in the skin, small intestine, esophagus, ovary, breast and prostate glands. Not detected in lymphatic vessels in the lung, kidney, uterus, liver and stomach (at protein level). Expressed in the poorly differentiated crypt cells of the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

DPPIV (Human) Antibody - Protocols

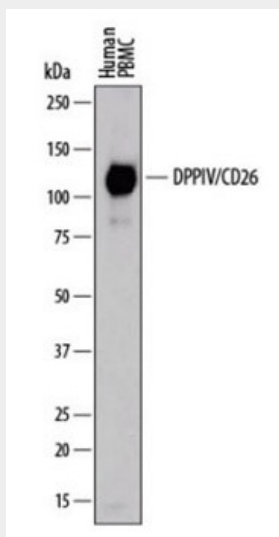
Provided below are standard protocols that you may find useful for product applications.

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

DPPIV (Human) Antibody - Images



DPPIV/CD26 in Human PBMCs. DPPIV/CD26 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Goat Anti-Human DPPIV/CD26 Antibody at 10 µg/mL for 3 hours at RT. Cells were stained using the Northern Lights 557-conjugated Anti-Goat IgG Secondary Antibody (yellow) and counterstained with DAPI (blue).



Detection of Human DPPIV/CD26 by Western Blot. Western blot shows lysates of human peripheral blood mononuclear cells (PBMC). PVDF membrane was probed with 0.2 µg/mL of Goat Anti-Human DPPIV/CD26 Antibody followed by HRP-conjugated Anti-Goat IgG Secondary Antibody. A specific band was detected for DPPIV/CD26 at approximately 110 kDa (as indicated).

DPPIV (Human) Antibody - Background

Dipeptidyl peptidase-IV (DPPIV), also known as adenosine deaminase complexing protein 2, DPPIV or CD26 is antigenic enzyme expressed on the surface of most cell types and is associated with immune regulation, signal transduction and apoptosis. It is an intrinsic membrane glycoprotein and

a serine exopeptidase that cleaves X-proline dipeptides from the N-terminus of polypeptides. The substrates of DPP-IV are proline (or alanine)-containing peptides and include growth factors, chemokines, neuropeptides, and vasoactive peptides. DPP-IV plays a major role in glucose metabolism. It is responsible for the degradation of incretins such as GLP-1. DPP-IV plays an important role in tumor biology, and is useful as a marker for various cancers, with its levels either on the cell surface or in the serum increased in some neoplasms and decreased in others. DPP-IV also binds the enzyme adenosine deaminase specifically and with high affinity. The significance of this interaction has yet to be established.