

## **DPP4 / CD26 Antibody (Internal)**

Rabbit Polyclonal Antibody Catalog # ALS11050

## **Specification**

## DPP4 / CD26 Antibody (Internal) - Product Information

Application IHC
Primary Accession P27487
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 88kDa KDa

## DPP4 / CD26 Antibody (Internal) - 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

## Target/Specificity

Human CD26. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

## **Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

## **Precautions**

DPP4 / CD26 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

## DPP4 / CD26 Antibody (Internal) - 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:<a href="http://www.uniprot.org/citations/10900005" target="\_blank">10900005</a>, PubMed:<a href="http://www.uniprot.org/citations/10951221" target="\_blank">10951221</a>, PubMed:<a href="http://www.uniprot.org/citations/11772392" target="\_blank">11772392</a>, PubMed:<a href="http://www.uniprot.org/citations/17287217" target="\_blank">17287217</a>). Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC (PubMed:<a href="http://www.uniprot.org/citations/10900005"



target=" blank">10900005</a>, PubMed:<a href="http://www.uniprot.org/citations/10951221" target="blank">10951221</a>, PubMed:<a href="http://www.uniprot.org/citations/11772392" target="blank">11772392</a>, PubMed:<a href="http://www.uniprot.org/citations/14691230" target=" blank">14691230</a>). Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner (PubMed: <a href="http://www.uniprot.org/citations/17287217" target=" blank">17287217</a>). Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion (PubMed: <a href="http://www.uniprot.org/citations/11772392" target=" blank">11772392</a>). 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:<a href="http://www.uniprot.org/citations/10593948" target=" blank">10593948</a>, PubMed:<a href="http://www.uniprot.org/citations/16651416" target="blank">16651416</a>). May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation (PubMed:<a href="http://www.uniprot.org/citations/18708048" target=" blank">18708048</a>). When overexpressed, enhanced cell proliferation, a process inhibited by GPC3 (PubMed:<a href="http://www.uniprot.org/citations/17549790" target=" blank">17549790</a>). Also acts 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: <a href="http://www.uniprot.org/citations/10570924" target=" blank">10570924</a>, PubMed:<a href="http://www.uniprot.org/citations/16254193" target="blank">16254193</a>). Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline (PubMed:<a href="http://www.uniprot.org/citations/10593948" target=" blank">10593948</a>).

#### **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

Volume 50 µl

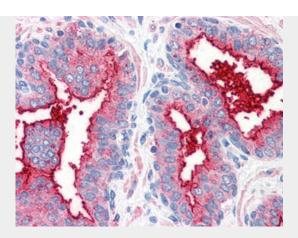
## DPP4 / CD26 Antibody (Internal) - Protocols

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

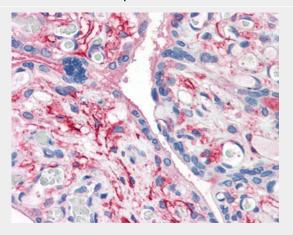
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# DPP4 / CD26 Antibody (Internal) - Images





Anti-CD26 antibody ALS11050 IHC of human prostate.



Anti-CD26 antibody ALS11050 IHC of human placenta.

# DPP4 / CD26 Antibody (Internal) - Background

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.

## DPP4 / CD26 Antibody (Internal) - References

Misumi Y., et al. Biochim. Biophys. Acta 1131:333-336(1992). Darmoul D., et al. J. Biol. Chem. 267:4824-4833(1992). Tanaka T., et al. J. Immunol. 149:481-486(1992). Tanaka T., et al. J. Immunol. 150:2090-2090(1993). Abbott C.A., et al. Immunogenetics 40:331-338(1994).