

DPP4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17870c

Specification

DPP4 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>P27487</u>
Other Accession	<u>NP_001926.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	88279
Antigen Region	357-384

DPP4 Antibody (Center) - Additional Information

Gene ID 1803

Other Names

Dipeptidyl peptidase 4, 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

This DPP4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 357-384 amino acids from the Central region of human DPP4.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

DPP4 Antibody (Center) - 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: 10900005, PubMed: 10951221, PubMed:<u>11772392</u>, PubMed:<u>17287217</u>). Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC (PubMed: 10900005, PubMed: 10951221, PubMed:11772392, PubMed: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:<u>17287217</u>). Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion (PubMed:<u>11772392</u>). 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: 10593948, PubMed: 16651416). May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation (PubMed: 18708048). When overexpressed, enhanced cell proliferation, a process inhibited by GPC3 (PubMed: 17549790). 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:<u>10570924</u>, PubMed:<u>16254193</u>). 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

DPP4 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- DPP4 Antibody (Center) Images





DPP4 Antibody (Center) (Cat. #AP17870c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the DPP4 antibody detected the DPP4 protein (arrow).

DPP4 Antibody (Center) - Background

The protein encoded by this gene is identical to adenosine deaminase complexing protein-2, and to the T-cell activation antigen CD26. It is an intrinsic membrane glycoprotein and a serine exopeptidase that cleaves X-proline dipeptides from the N-terminus of polypeptides.

DPP4 Antibody (Center) - References

Takasawa, W., et al. Biochem. Biophys. Res. Commun. 401(1):7-12(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Tansi, F.L., et al. Virol. J. 7, 267 (2010) : Firneisz, G., et al. PLoS ONE 5 (8), E12226 (2010) : Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :