

DPP4 / CD26 Antibody (clone 11D7)

Mouse Monoclonal Antibody Catalog # ALS16718

Specification

DPP4 / CD26 Antibody (clone 11D7) - Product Information

Application IHC, IF, WB, FC

Primary Accession P27487
Other Accession 1803
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Isotype IgG1
Calculated MW 88279

DPP4 / CD26 Antibody (clone 11D7) - Additional Information

Gene ID 1803

Other Names

DPP4, ADCP-2, ADABP, Dipeptidyl peptidase IV, Dipeptidyl-peptidase 4, DPPIV, ADCP2, T-cell activation antigen CD26, CD26, CD26 antigen, Dipeptidyl peptidase 4, Dipeptidylpeptidase 4, DPP IV, TP103

Target/Specificity

Human DPP4 / CD26

Reconstitution & Storage

PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide. Store at -20°C. Minimize freezing and thawing.

Precautions

DPP4 / CD26 Antibody (clone 11D7) is for research use only and not for use in diagnostic or therapeutic procedures.

DPP4 / CD26 Antibody (clone 11D7) - 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, PubMed:10900005, PubMed:11772392, PubMed:17287217). Acts as a positive regulator of T-cell coactivation, by binding at



least ADA, CAV1, IGF2R, and PTPRC (PubMed:10951221, PubMed:10900005, 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: 17287217). Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion (PubMed: 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, PubMed:10593948). 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). 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, PubMed: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

Volume 50 μl

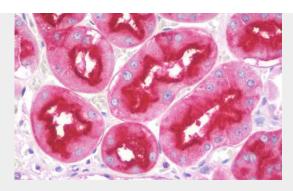
DPP4 / CD26 Antibody (clone 11D7) - Protocols

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

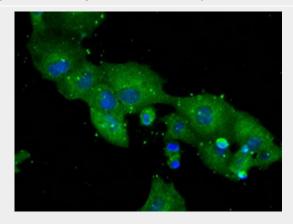
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DPP4 / CD26 Antibody (clone 11D7) - Images

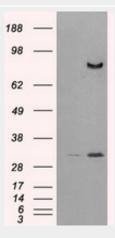




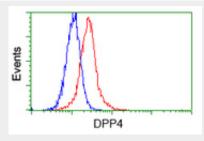
Anti-DPP4 / CD26 antibody IHC staining of human kidney.



Anti-DPP4 mouse monoclonal antibody immunofluorescent staining of COS7 cells transiently...



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY DPP4...



Flow cytometry of HeLa cells, using anti-DPP4 antibody, (Red) compared to a nonspecific negative...

DPP4 / CD26 Antibody (clone 11D7) - Background





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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 (clone 11D7) - 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).