

Goat Anti-DPP4 / CD26 Antibody

Peptide-affinity purified goat antibody Catalog # AF1339a

Specification

Goat Anti-DPP4 / CD26 Antibody - Product Information

Application WB, IHC, FC, Pep-ELISA

Primary Accession P27487

Other Accession NP_001926, 1803, 13482 (mouse), 25253 (rat)

Reactivity

Predicted Human, Mouse, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 88279

Goat Anti-DPP4 / CD26 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

Dilution

WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 Pep-ELISA~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-DPP4 / CD26 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-DPP4 / CD26 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:10900005, PubMed:10951221, PubMed:11772392, PubMed:17287217). 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: 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: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: 10570924, PubMed:16254193). 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

Goat Anti-DPP4 / CD26 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

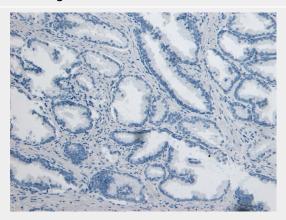
Goat Anti-DPP4 / CD26 Antibody - Images



EB07835 (0.3 μ g/ml) staining of Rat Lung lysate (35 μ g protein in RIPA buffer). Detected by chemiluminescence.



EB07835 ($8\mu g/ml$) staining of paraffin embedded Human Prostate. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.

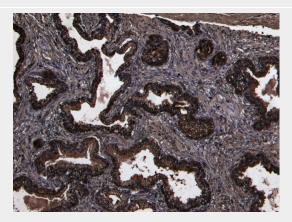


EB07835 Negative Control showing staining of paraffin embedded Human Prostate, with no primary antibody.

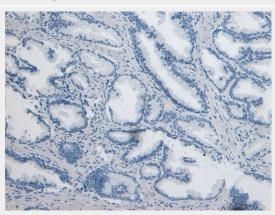


250kDa 150kDa 100kDa 75kDa 50kDa 37kDa 25kDa 20kDa

EB07835 (0.3 μ g/ml) staining of Rat Lung lysate (35 μ g protein in RIPA buffer). Detected by chemiluminescence.

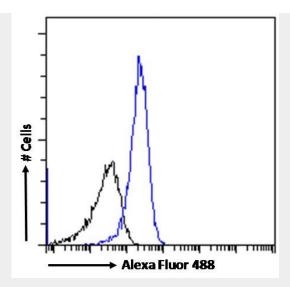


EB07835 (8μg/ml) staining of paraffin embedded Human Prostate. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.

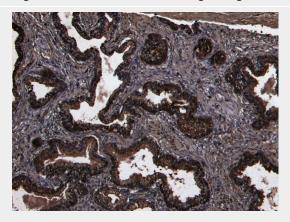


EB07835 Negative Control showing staining of paraffin embedded Human Prostate, with no primary antibody.

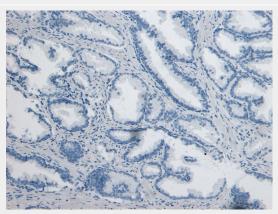




EB07835 Flow cytometric analysis of paraformaldehyde fixed HepG2 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fo

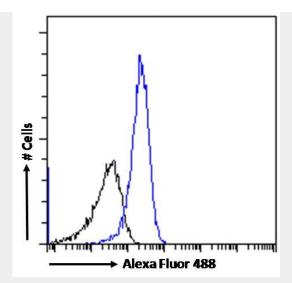


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EB07835 Flow cytometric analysis of paraformaldehyde fixed HepG2 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

Goat Anti-DPP4 / CD26 Antibody - 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.

Goat Anti-DPP4 / CD26 Antibody - References

Evaluation of candidate stromal epithelial cross-talk genes identifies association between risk of serous ovarian cancer and TERT, a cancer susceptibility hot-spot. Johnatty SE, et al. PLoS Genet, 2010 Jul 8. PMID 20628624.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Biomarkers in chronic fatigue syndrome: evaluation of natural killer cell function and dipeptidyl peptidase IV/CD26. Fletcher MA, et al. PLoS One, 2010 May 25. PMID 20520837.

Association study of 182 candidate genes in anorexia nervosa. Pinheiro AP, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jul. PMID 20468064.

Expression and activity profiles of DPP IV/CD26 and NEP/CD10 glycoproteins in the human renal cancer are tumor-type dependent. Varona A, et al. BMC Cancer, 2010 May 11. PMID 20459800.