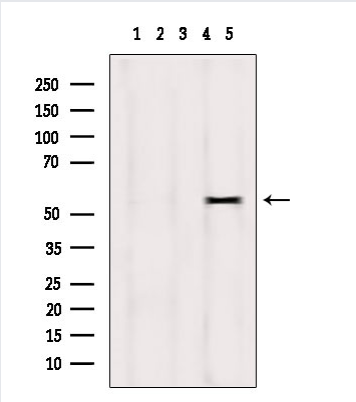
DPP4 Antibody – Rabbit Polyclonal

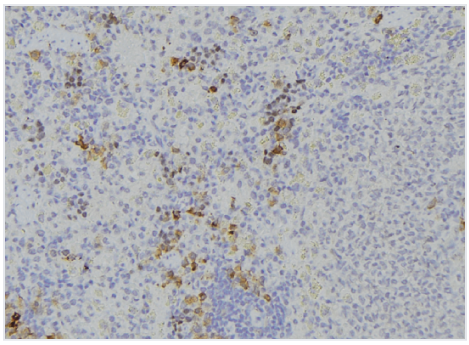
PRODUCT OVERVIEW

Product Name	DPP4, Polyclonal Antibody
Full Product Name	DPP4 Antibody
Product Gene Name	anti-DPP4 antibody
Product Synonym Names	CD26 antigen; ADA-binding protein; ADABP; ADCP 2; ADCP-2; ADCP2; Adenosine deaminase complexing protein 2; CD 26; CD26; CD26 antigen 3; Dipeptidyl peptidase 4; Dipeptidyl peptidase 4 soluble form; Dipeptidyl peptidase IV; Dipeptidyl peptidase IV membrane form; Dipeptidyl peptidase IV soluble form; Dipeptidyl peptidase, intestinal; Dipeptidylpeptidase 4; Dipeptidylpeptidase IV (CD26, adenosine deaminase complexing protein 2); Dipeptidylpeptidase IV; DPP 4; DPP IV; DPP IV estoenzyme; DPP4; DPP4_HUMAN; DPPIV; Intestinal dipeptidyl peptidase; T cell activation antigen CD26; T-cell activation antigen CD26; TP 103; TP103
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Concentration	1mg/ml (lot specific)
Specificity	DPP4 antibody detects endogenous levels of DPP4.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	CD26 peptide (MBS9621092) is used for blocking the activity of CD26 antibody (MBS9603615)
Molecular Weight	Observed: 55-60 kDa Predicted: 89 kDa
3D Structure	ModBase 3D Structure for P27487
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide derived from human DPP4.
Subcellular Location	Cell Membrane. Apical Cell Membrane. Cell Projection > Invadopodium Membrane. Cell Projection > Lamellipodium Membrane. Cell Junction. Membrane Raft. Translocated to the apical membrane through the concerted action of N- and O-Glycans and its association with lipid microdomains containing cholesterol and sphingolipids. Redistributed to membrane rafts in T-cell in a interleukin-12-dependent activation. Its interaction with CAV1 is necessary for its translocation to membrane rafts. Colocalized with PTPRC in membrane rafts. Colocalized with FAP in invadopodia and lamellipodia of migratory activated endothelial cells in collagenous matrix. Colocalized with FAP on endothelial cells of capillary-like microvessels but not large vessels within invasive breast ductal carcinoma. Colocalized with ADA at the cell junction in lymphocyte-epithelial cell adhesion. Colocalized with IGF2R in internalized cytoplasmic vesicles adjacent to the cell surface and Secreted. Detected in the serum and the seminal fluid.
Tissue Specificity	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.
Predicted Cross Reactivity	**Pig, Bovine, Horse, Rabbit**

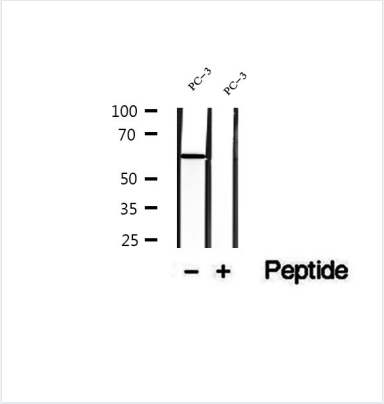
Similarity	Pig (92%), Bovine (92%), Horse (100%), Rabbit (100%)
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-DPP4 antibody	Western Blot (WB), Immunohistochemistry (IHC)
Application Notes for anti-DPP4 antibody	WB: 1:500-1:2000 IHC: 1:50-1:200
Related Product Information for anti-DPP4 antibody	Function: 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. Subunit Structure: Monomer. Homodimer (PubMed:12832764, PubMed:15448155, PubMed:17287217, PubMed:12646248, PubMed:12483204, PubMed:12906826). Heterodimer with Seprase (FAP) (PubMed:16651416). Requires homodimerization for optimal dipeptidyl peptidase activity and T-cell costimulation. Found in a membrane raft complex, at least composed of BCL10, CARD11, DPP4 and IKBKB (PubMed:17287217). Associates with collagen (PubMed:8526932). Interacts with PTPRC; the interaction is enhanced in a interleukin-12-dependent manner in activated lymphocytes (PubMed:12676959). Interacts (via extracellular domain) with ADA; does not inhibit its dipeptidyl peptidase activity (PubMed:15016824, PubMed:10951221, PubMed:14691230, PubMed:7907293, PubMed:8101391). Interacts with CAV1 (via the N-terminus); the interaction is direct (PubMed:17287217). Interacts (via cytoplasmic tail) with CARD11 (via PDZ domain); its homodimerization is necessary for interaction with CARD11 (PubMed:17287217). Interacts with IGF2R; the interaction is direct (PubMed:10900005). Interacts with GPC3 (PubMed:17549790). Interacts with human coronavirus-EMC spike protein and acts as a receptor for this virus (PubMed:23486063). Post-translational Modifications: The soluble form (Dipeptidyl peptidase 4 soluble form also named SDPP) derives from the membrane form (Dipeptidyl peptidase 4 membrane form also named MDPP) by proteolytic processing. N- and O-Glycosylated. Phosphorylated. Mannose 6-phosphate residues in the carbohydrate moiety are necessary for interaction with IGF2R in activated T-cells. Mannose 6-phosphorylation is induced during T-cell activation. Similarity: The extracellular cysteine-rich region is necessary for association with collagen, dimer formation and optimal dipeptidyl peptidase activity. Belongs to the peptidase S9B family. DPPIV subfamily.
Other Notes	Small volumes of anti-DPP4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for DPP4 purchase	MBS9603615 is an antibody targeting DPP4. Also known as DPP4 Antibody. Reactive in Human, Mouse. Host: Rabbit.



Western Blot (WB) of anti-DPP4 antibody
Western blot analysis of extracts from hepg2, using DPP4 antibody. Lane 1 was treated with the blocking peptide.



Immunohistochemistry (IHC) of anti-DPP4 antibody
MBS9603615 at 1/100 staining Human lymph node tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blot (WB) of anti-DPP4 antibody
Western blot analysis of extracts of PC-3 cells, using DPP4 antibody.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DPP4. It may not necessarily be applicable to this product.

NCBI GI #	18765694
NCBI GeneID	1803
NCBI Accession #	NP_001926.2
UniProt Primary Accession #	P27487
UniProt Secondary Accession #	Q53TN1
UniProt Related Accession #	P27487
GenBank Nucleotide #	NM_001935.3
NCBI Official Full Name	dipeptidyl peptidase 4
NCBI Official Synonym Full Names	dipeptidyl peptidase 4
NCBI Official Symbol	DPP4
NCBI Official Synonym Symbols	CD26; ADABP; ADCP2; DPPIV; TP103
UniProt Protein Name	Dipeptidyl peptidase 4
UniProt Synonym Protein Names	ADABP; Adenosine deaminase complexing protein 2; ADCP-2
Protein Family	Dipeptidyl peptidase
UniProt Gene Name	DPP4

UniProt Synonym Gene Names	ADCP2; CD26; ADCP-2; DPP IV
NCBI Protein Information	dipeptidyl peptidase 4
NCBI Summary for DPP4	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. [provided by RefSeq, Jul 2008]
UniProt Comments for DPP4	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.
Research Articles on DPP4	**1.** API was demonstrated to inhibit the migration/invasion of NSCLC cells harboring different EGFR statuses via suppressing the Snail/Slug-mediated EMT..CD26 may be a useful biomarker for predicting NSCLC progression. API effectively suppressed lung cancer progression by targeting the CD26-Akt-Snail/Slug signaling pathway
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