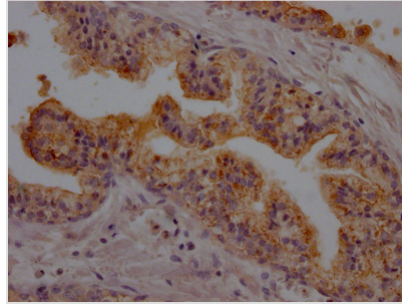




DPP4 Recombinant Monoclonal Antibody

Product Code	CSB-RA927191A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P27487
Immunogen	A synthesized peptide derived from human CD26
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology; Immunology; Metabolism; Stem cells
Gene Names	DPP4
Clone No.	6G7
Image	



IHC image of CSB-RA927191A0HU diluted at 1:100 and staining in paraffin-embedded human prostate cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The DPP4 recombinant monoclonal antibody is generated through recombinant DNA technology and can be utilized for detecting human DPP4 protein in ELISA and IHC applications. To produce this antibody, the cDNA of the DPP4 antibody-producing hybridomas is sequenced and the gene that codes for the DPP4 monoclonal antibody is synthesized. Myeloma cells and B cells obtained from an animal that was immunized with a synthesized peptide derived from human DPP4 are fused to generate hybridomas. The synthesized gene is then cloned into a vector, which is transfected into cells for cultivation. Finally, the DPP4 recombinant monoclonal antibody is obtained from the cell culture supernatant through affinity chromatography purification.

The DPP4 protein, also known as CD26, is a serine exopeptidase that cleaves dipeptides from the N-terminus of proteins and peptides. In particular, DPP4 has been implicated in the regulation of glucose metabolism through its cleavage of incretin hormones such as GLP-1 and GIP, which stimulate insulin secretion from pancreatic beta cells. DPP4 has also been implicated in the regulation of immune function, including T-cell activation, migration, and proliferation.