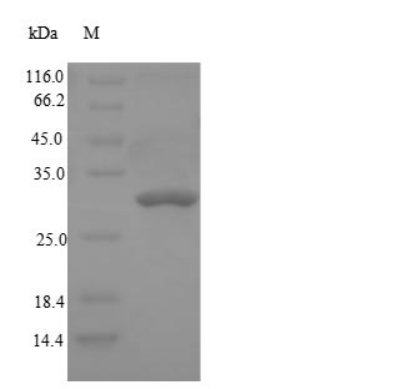
Recombinant Rat Dipeptidyl peptidase 4 (Dpp4), partial

Product Code	CSB-EP007139RA
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 domain 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.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P14740
Alias	Bile canaliculus domain-specific membrane glycoprotein Dipeptidyl peptidase IV Short name: DPP IV GP110 glycoprotein T-cell activation antigen CD26 CD_antigen: CD26 Cleaved into the following 3 chains: Dipeptidyl peptidase 4 membrane form Alternative name(s): Dipeptidyl peptidase IV membrane form Dipeptidyl peptidase 4 soluble form Alternative name(s): Dipeptidyl peptidase IV soluble form Dipeptidyl peptidase 4 60 kDa soluble form Alternative name(s): Dipeptidyl peptidase IV 60 kDa soluble form
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SMVLGSGSGVFKCGIAVAPVSRWEYYDSVYTERYMGLPTPEDNLDHYRNSTV MSRAENFKQVEYLLIHGTADDNVHFQQSAQISKALVDAGVDFQAMWYTDEDH GIASSTAHQHIYSHMSHFLQQCFSLR
Lead Time	3-7 business days
Research Area	Immunology
Source	E.coli

Gene Names	Dpp4
Expression Region	638-767aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	30.7kDa
Protein Description	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Just like other recombinant proteins, the production of this recombinant Rat Dpp4 protein began with appropriate cDNA and PCR methods, and then the Dpp4 expression plasmids were built. Following sequence determination of the constructs, plasmids were transformed into E.coli for the expression of the recombinant Rat Dpp4 protein. N-terminal 6xHis-SUMO tag was used in the process. And we finally get the protein of interest with purity of 90%+.

Dpp4 is a gene providing an instruction of making a protein named dipeptidyl peptidase 4 in rattus norvegicus (rat). Dipeptidyl peptidase 4 is also known as bile canaliculus domain-specific membrane glycoprotein, dipeptidyl peptidase IV (DPP IV), GP110 glycoprotein and T-cell activation antigen CD26 (CD26). This protein can be cleaved into 3 chains, including dipeptidyl peptidase 4 membrane form, dipeptidyl peptidase 4 soluble form and dipeptidyl peptidase 4 60 kDa soluble form. It is involved in many biological processes, such as cell adhesion, endothelial cell migration, T cell activation, etc.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.