

Active Recombinant Cynomolgus DPP4, Fc-tagged

Cat. No. DPP4-119C **Lot. No.** (See product label)

SPECIFICATION

Product Overview

A DNA sequence encoding the cynomolgus DPP4 (F6VRB0) (Asp34-Pro766) was expressed with the Fc region of human IgG1 at the C-terminus.

Species

Cynomolgus

Source

Human Cells

ProteinLength

34-766 a.a.

Description

Dipeptidyl Peptidase IV (DPPIV)/CD26, is a highly conserved type II integral membrane protein associated with immune regulation, signal transduction and apoptosis, and is constitutively expressed on a wide variety of epithelial, endothelial, and lymphoid cell types. DPPIV is a serine exopeptidase catalyzing the cleavage of N-terminal Xaa-Pro dipeptides from peptides, and its substrates include growth factors, chemokines, neuropeptides, and vasoactive peptides. As a T cell-activating molecule (THAM), DPPIV plays important roles in the T cell-mediated immune responses through the regulation of differentiation and growth of T lymphocytes, and also probably acts as a cofactor for entry of HIV in CD4+ cells. Furthermore, DPPIV appears to work as a suppressor in the progression of certain tumors, and also exerts actions in glucose metabolism via interaction with glucagons. DPPIV also binds the enzyme adenosine deaminase specifically with high affinity. Elevated expression of DPPIV is associated with autoimmune diseases, such as multiple sclerosis and rheumatoid arthritis. The levels of DPPIV soluble form in serum and body fluids have clinical significance in patients with cancer, liver, kidney diseases and depression.

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Predicted N Terminal	Glu
Form	Lyophilized from sterile 25 mM MES, 0.7 M NaCl, pH 4.9.
Bio-activity	Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Pro-AMC(GP-AMC). The specific activity is > 3, 000 pmoles/min/μg. Measured by its ability to transfer sulfate from PAPS to 1-Naphthol. The specific activity is > 40 pmoles/min/μg.
Molecular Mass	The recombinant cynomolgus DPP4 is a disulfide-linked homodimer. The reduced monomer comprises 993 amino acids and has a calculated molecular mass of 112.9 KDa. The apparent molecular mass of the protein is approximately 113 KDa in SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method
Purity	> 90 % as determined by SDS-PAGE
Storage	Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	DPP4 dipeptidyl-peptidase 4 [<i>Macaca fascicularis</i> (crab-eating macaque)]
Official Symbol	DPP4
Synonyms	DPP4; dipeptidyl-peptidase 4
Gene ID	102133935
mRNA Refseq	XM_005573317

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Protein Refseq	XP_005573374
Chromosome Location	12
Pathway	Protein digestion and absorption

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