Recombinant Human DPP4/CD26 Protein

Catalog Number: PKSH033811

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

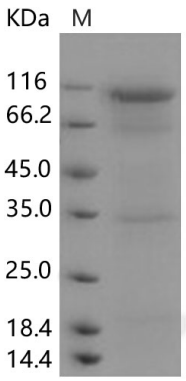
Description

Species	Human
Source	HEK293 Cells-derived Human DPP4/CD26 protein Asn29-Pro766
Calculated MW	85.4 kDa
Observed MW	95 kDa
Accession	NP_001926.2
Bio-activity	1. Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Pro-7-amido-4-methylcoumarin (GP-AMC). The specific activity is > 2, 500 pmoles/min/μg. 2. Using the Octet RED System, the affinity constant (Kd) of Recombinant Human DPP4/CD26 Protein(Active)(Cat: PKSH033811) bound to Recombinant MERS-CoV Spike Protein (S1+S2 ECD, aa 1-1297, His Tag) (Cat: PKSV030236) was 33 nM. 3. Using the Octet RED System, the affinity constant (Kd) of Recombinant Human DPP4/CD26 Protein(Active)(Cat: PKSH033811) bound to Recombinant HCoV-HKU1 (Isolate N1) S1 Protein (His Tag) (Cat: PKSV030109) was 12 nM.

Properties

Purity	> 70 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 100mM NaCl, 50mM Tris, pH 7.5 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 70 % as determined by reducing SDS-PAGE.

Background

Dipeptidyl peptidase-4 (DPP4) or adenosine deaminase complexing protein 2 (ADCP 2) or T-cell activation antigen CD26 is a serine exopeptidase belonging to the S9B protein family that cleaves X-proline dipeptides from the N-terminus of polypeptides, such as chemokines, neuropeptides, and peptide hormones. The enzyme is a type II transmembrane glycoprotein, expressed on the surface of many cell types. It is also present in serum and other body fluids in a truncated form (sCD26/DPPIV). The soluble CD26 (sCD26) as a tumour marker for the detection of colorectal cancer (CRC) and advanced adenomas. As both a regulatory enzyme and a signalling factor, DPP4 has been evaluated and described in many studies. DPP4 inhibition results in increased blood concentration of the incretin hormones glucagon-like peptide-1 (GLP-1) and gastric inhibitory polypeptide (GIP). This causes an increase in glucose-dependent stimulation, resulting in a lowering of blood glucose levels. Recent studies have shown that DPP4 inhibitors can induce a significant reduction in glycosylated haemoglobin (HbA(1c)) levels, either as monotherapy or as a combination with other antidiabetic agents. Research has also demonstrated that DPP4 inhibitors portray a very low risk of hypoglycaemia development, and are a new pharmacological class of drugs for treating Type 2 diabetes.

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