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Datasheet for ABIN7195427

DPP4 Protein

Overview

Quantity:	50 µg
Target:	DPP4
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	Recombinant Human DPP4/CD26 Protein(Active)
Sequence:	Asn29-Pro766
Characteristics:	The native mature form of human DPP4 (NP_001926.2) extracellular domain (Asn 29-Pro 766) was expressed and purified.
Purity:	> 70 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method
Biological Activity Comment:	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.

Target Details

Target:	DPP4
Alternative Name:	DPP4/CD26 (DPP4 Products)
Background:	<p>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.</p> <p>Synonym: ADABP Protein, Human, ADCP2 Protein, Human, CD26 Protein, Human, DPPIV Protein, Human, TP103 Protein, Human</p>
Molecular Weight:	85.4kDa
NCBI Accession:	NP_001926
Pathways:	Peptide Hormone Metabolism , Regulation of Leukocyte Mediated Immunity

Application Details

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 100 mM NaCl, 50 mM Tris, pH 7.5 Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.

Handling

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.