

Recombinant Human DPP4/DPPIV/CD26 Protein (Fc Tag)

Catalog No. PKSH030456

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

Description

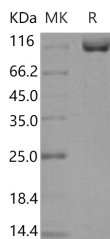
Synonyms	Dipeptidyl peptidase 4;ADABP;Adenosine deaminase complexing protein 2;ADCP-2;Dipeptidyl peptidase IV;DPP IV;T-cell activation antigen CD26
Species	Human
Expression Host	HEK293 Cells
Sequence	Asn 29-Pro 766
Accession	NP_001926.2
Calculated Molecular Weight	112 kDa
Observed molecular weight	120-130 kDa
Tag	N-hFc
Bioactivity	<ol style="list-style-type: none"> 1. Measured by its ability to bind recombinant Cynomolgus CXCL12 in a functional ELISA. 2. Measured by its ability to bind recombinant Human SDF1b in a functional ELISA. 3. Using the Octet RED System, the affinity constant (Kd) of human Fc-DPPIV bound to Spike (HCoV-EMC/2012) was 11 nM. 4. Using the Octet RED System, the affinity constant (Kd) of human Fc-DPPIV bound to Spike (HCoV-EMC/2012) was 32 nM. 5. Using the Octet RED System, the affinity constant (Kd) of human Fc-DPPIV bound to Spike (HCoV-EMC/2012) (ECD, aa 1-1297) was 43 nM. 6. Using the Octet RED System, the affinity constant (Kd) of human Fc-DPPIV bound to Spike-His (aa 1-760) was 12 nM.

Properties

Purity	> 95 % 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°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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	<p>Lyophilized from sterile PBS, pH 7.4</p> <p>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.</p> <p>Please refer to the specific buffer information in the printed manual.</p>
Reconstitution	Please refer to the printed manual for detailed information.

Data

For Research Use Only



> 95 % 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.