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

Catalog Number: PKSH030456

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

Description			
Species	Human		
Source	HEK293 Cells-derived Human DPP4/DPPIV/CD26 protein Asn 29-Pro 766, with an N-		
	terminal hFc		
Calculated MW	112 kDa		
Observed MW	120-130 kDa		
Accession	NP_001926.2		
Bio-activity	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 $< -20^{\circ}$ C for 3 months.		
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.		
Formulation	Lyophilized from sterile PBS, pH 7.4		
	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

MK	R
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-	
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	MK

> 95 % as determined by reducing SDS-PAGE.

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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.