



Recombinant Protein Technical Manual

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

RPES2473

Product Data:

Product SKU: RPES2473

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001926.2

Protein Information:

Molecular Mass: 112 kDa

AP Molecular Mass: 12030 kDa

Tag: N-Fc

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 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.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Dipeptidyl peptidase 4; ADABP; Adenosine deaminase complexing protein 2; ADCP-2; Dipeptidyl peptidase IV; DPP IV; T-cell activation antigen CD26

Immunogen Information:

Sequence: Asn 29-Pro 766

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 (GLP) 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.