DPP4
Recombinant Human Dipeptidyl peptidase 4 / CD26 (Fc Tag)

Catalog No.	CRH540A-Fc CRH540B-Fc	**Quantity:**	10 µg 20 µg

Alternate Names: Dipeptidyl peptidase 4, ADABP, Adenosine deaminase complexing protein 2, ADCP-2, Dipeptidyl peptidase IV, DPP IV, T-cell activation antigen CD26, TP103, CD26

Description: Dipeptidyl peptidase 4 (DPP4) 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) is a tumor marker for the detection of colorectal cancer and advanced adenomas. As both a regulatory enzyme and a signaling 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 hemoglobin (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 hypoglycemia development, and are a new pharmacological class of drugs for treating Type 2 diabetes.

UniProt ID: P27487

Accession Number: NP_001926.2

Protein Construction: A DNA sequence encoding the extracellular domain (Asn 29-Pro 766) of the mature form of human DPPIV was expressed with the fused Fc region of human IgG1 at the N-terminus.

Source: HEK293 Cells

Formulation: Lyophilized from sterile PBS, pH 7.4
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The rhDPP4/Fc is a disulfide-linked homodimer. The reduced monomer consists of 975 aa with a predicted MW of 112 kDa and migrates at ~120-130 kDa in SDS-PAGE under reducing conditions, due to glycosylation.

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

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

Predicted N-terminal: Glu 20

Biological Activity:
1. Binds recombinant Cynomolgus CXCL12 in a functional ELISA.
2. Binds 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.

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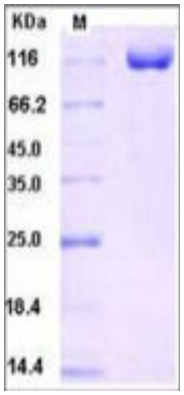
4. Using the Octet RED System, the affinity constant (Kd) of human Fc-DPPIV bound to Spike (HCoV-EMC/2012) was 32 nM.
5. Using the Octet RED System, the affinity constant (Kd) of human Fc-DPPIV bound to Spike (HCoV-EMC/2012) (ECD, aa 1-1297) was 43 nM.
6. Using the Octet RED System, the affinity constant (Kd) of human Fc-DPPIV bound to Spike-His (aa 1-760) was 12 nM.

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

SDS-PAGE



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