

DPP4/CD26 Active Protein | DPP4 active protein

DPP4/CD26 Protein, Human, Recombinant (hFc Tag)

CATALOG #
AAA257911

HOST
HEK293 Cells

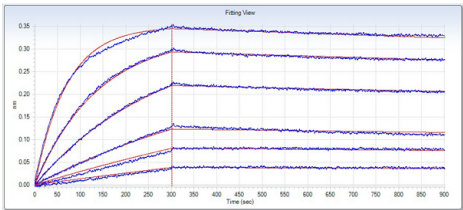
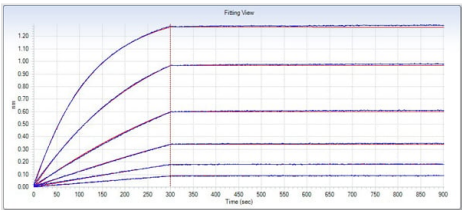
PRODUCT SYNONYMS

DPP4/CD26; DPP4/CD26 Protein; Human; Recombinant (hFc Tag); Human DPP4/DPPIV/CD26 Protein (Fc Tag); ADABP Protein; ADCP2 Protein; CD26 Protein; DPPIV Protein; TP103 Protein; dipeptidylpeptidase 4; DPP4 active protein

PRODUCT SPECIFICATIONS

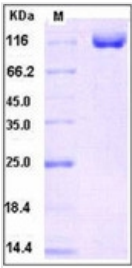
Host	HEK293 Cells
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Asn29-Pro7 66
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Glu 20
Tag	N-human IgG1-Fc
Protein Construction	A DNA sequence encoding the extracellular domain (Asn 29-Pro 766) of the mature form of human DPPIV (NP_001926.2) was expressed with the fused Fc region of human IgG1 at the N-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
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. Loaded Fc-DPPIV on ProA Biosensor, can bind MERS-CoV Spike/RBD Protein fragment (RBD, aa 367-606, His Tag) with an affinity constant of 1.04nM as determined by Octet RED System. 4. Loaded Fc-DPPIV on ProA Biosensor, can bind MERS-CoV Spike/S1 Protein (S1 Subunit, aa 1-725, His Tag) with an affinity constant of 0.02nM as determined by Octet RED System. 5. Loaded Fc-DPPIV on ProA Biosensor, can bind MERS-CoV Spike/RBD Protein fragment (RBD, aa 367-606, His Tag) with an affinity constant of 1.04nM as determined by Octet RED System. 6. Loaded Fc-DPPIV on ProA Biosensor, can bind MERS-CoV Spike/S1 Protein (S1 Subunit, aa 1-725, His Tag) with an affinity constant of 0.02nM as determined by Octet RED System.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.

IMAGES



Application Data
Loaded Fc-DPP4 on ProA Biosensor, can bind MERS-CoV Spike/S1 Protein (S1 Subunit, aa 1-725, His Tag) with an affinity constant of 0.02 nM as determined by Octet RED System.

Application Data
Loaded Fc-DPP4 on ProA Biosensor, can bind MERS-CoV Spike/RBD Protein fragment (RBD, aa 367-606, His Tag) with an affinity constant of 1.04 nM as determined by Octet RED System.



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for DPP4 active protein

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.

Product Categories/Family for DPP4 active protein

[Serine Proteases and Regulators](#)

References

Doupis J, et al. (2008) DPP4 inhibitors: a new approach in diabetes treatment. Adv Ther. 25(7): 627-43. Havre PA, et al. (2008) The role of CD26/dipeptidyl peptidase IV in cancer. Front Biosci. 13: 1634-45. De Chiara L, et al. (2009) Soluble CD26 levels and its association to epidemiologic parameters in a sample population. Dis Markers. 7(6): 311-6. Matteucci E, et al. (2009) Dipeptidyl peptidase-4 (CD26): knowing the function before inhibiting the enzyme. Curr Med Chem. 16(23): 2943-51.

NCBI AND UNIPROT INFORMATION

NCBI GI #	18765694
NCBI GeneID	1803
NCBI Accession #	NP_001926.2
NCBI GenBank Nucleotide #	NM_001935.3
UniProt Accession #	P27487; Q53TN1
Molecular Weight	766

NCBI Official Full Name	dipeptidyl peptidase 4
NCBI Official Synonym Full Names	dipeptidyl-peptidase 4
NCBI Official Symbol	DPP4
NCBI Official Synonym Symbols	CD26; ADABP; ADCP2; DPPIV; TP103
NCBI Protein Information	dipeptidyl peptidase 4; ADCP-2; DPP IV; dipeptidylpeptidase 4; dipeptidyl peptidase IV; T-cell activation antigen CD26; adenosine deaminase complexing protein 2; dipeptidylpeptidase IV (CD26, adenosine deaminase complexing protein 2)
UniProt Protein Name	Dipeptidyl peptidase 4
UniProt Gene Name	DPP4
UniProt Synonym Gene Names	ADCP2; CD26; ADCP-2; DPP IV
UniProt Entry Name	DPP4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-active-protein/dpp4-cd26/257911>