Human DPPIV / CD26 Protein, Fc Tag (active enzyme)

Catalog # DP4-H5266

Synonym

DPP4,ADABP,ADCP2,CD26,DPPIV,TP103

Source

Human DPPIV, Fc Tag(DP4-H5266) is expressed from human 293 cells (HEK293). It contains AA Asn 29 - Pro 766 (Accession # NP_001926.2).

Molecular Characterization

Fc(Thr 106 - Lys 330) P01857	DPPIV(Asn 29 - Pro 766) NP_001926.2

This protein carries a human IgG1 Fc tag at the N-terminus

The protein has a calculated MW of 112.3 kDa. The protein migrates as 90-116 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

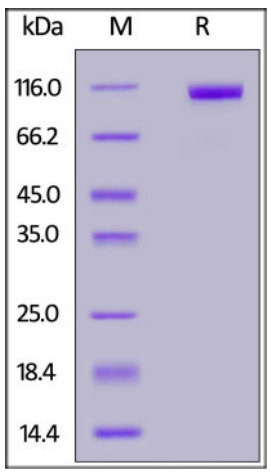
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

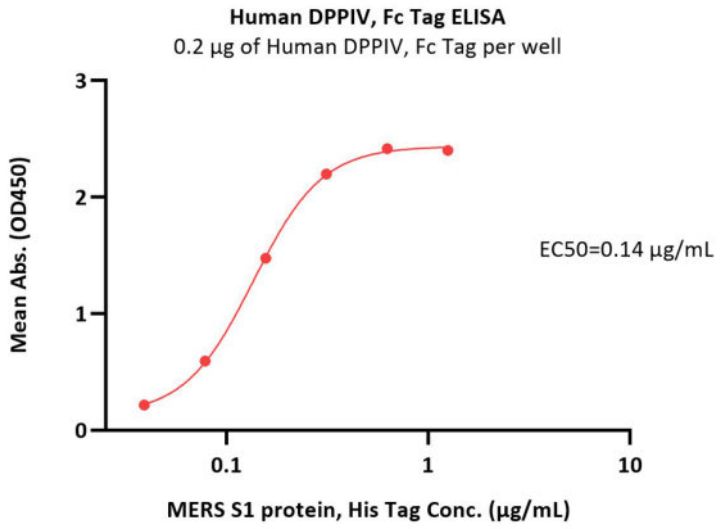
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human DPPIV, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human DPPIV, Fc Tag (Cat. No. DP4-H5266) at 2 μg/mL (100 μL/well) can bind MERS S1 protein, His Tag (Cat. No. S1N-M52H5) with a linear range of 0.039-0.156 μg/mL (Routinely tested).

Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Pro-7-amido-4-methylcoumarin (GP-AMC). The specific activity is >3500 pmol/min/μg (QC tested).

Background

Dipeptidyl peptidase-IV (DPPIV) is also known as adenosine deaminase complexing protein 2, DPPIV or CD26 is antigenic enzyme expressed on the surface of most cell types and is associated with immune regulation, signal transduction and apoptosis. It is an intrinsic membrane glycoprotein and a serine exopeptidase that cleaves X-proline dipeptides from the N-terminus of polypeptides. The substrates of DPPIV are proline (or alanine)-containing peptides and include growth factors, chemokines, neuropeptides, and vasoactive peptides. DPPIV plays a major role in glucose metabolism. It is responsible for the degradation of incretins such as GLP-1. DPPIV plays an important role in tumor biology, and is useful as a marker for various cancers, with its levels either on the cell surface or in the serum increased in some neoplasms and decreased in others. DPPIV also binds the enzyme adenosine deaminase specifically and with high affinity. The significance of this interaction has yet to be established.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.