

Synonym

DPP4,ADABP,ADCP2,CD26,DPPIV,TP103

Source

Human DPPIV, His Tag (DP4-H5221) is expressed from human 293 cells (HEK293). It contains AA Asp 34 - Pro 766 (Accession # [NP_001926.2](#)).

Predicted N-terminus: Asp 34

Molecular Characterization

DPPIV(Asp 34 - Pro 766) NP_001926.2	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 85.7 kDa. The protein migrates as 95 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.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

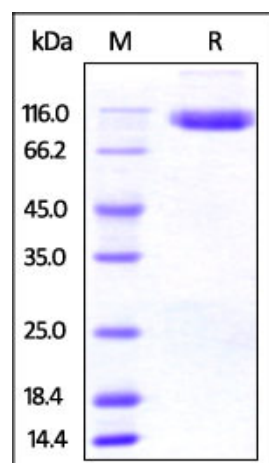
Storage

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:

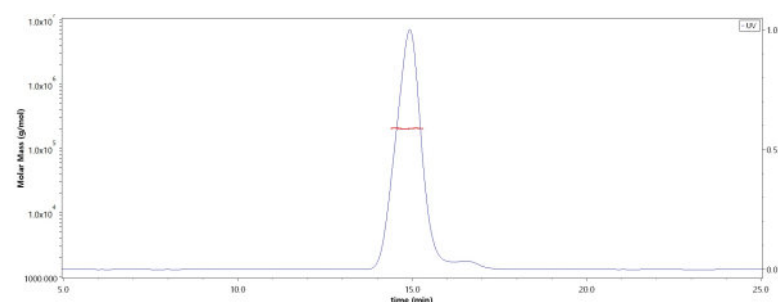
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human DPPIV, His 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%.

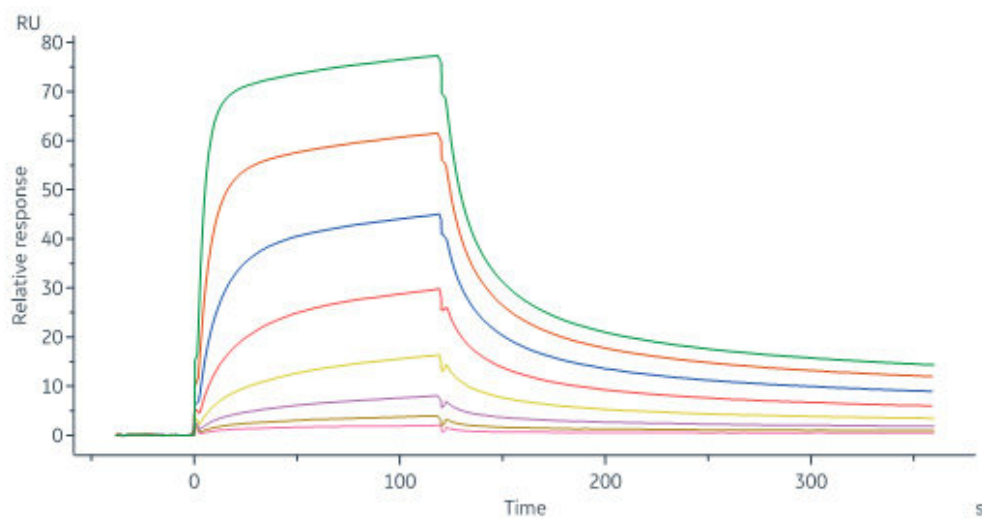
Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Pro-7-amido-4-methylcoumarin (GP-AMC). The specific activity is >8500 pmol/min/µg (QC tested).

Bioactivity-SPR**SEC-MALS**

The purity of Human DPPIV, His Tag (Cat. No. DP4-H5221) is more than 95% and the molecular weight of this protein is around 190-220 kDa verified by SEC-MALS.

[Report](#)



Human DPPIV, His Tag (Cat. No. DP4-H5221) immobilized on CM5 Chip can bind MERS S1 protein, His Tag (Cat. No. S1N-M52H5) with an affinity constant of 0.303 μM as determined in a SPR assay (Biacore 8K) (Routinely 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.