Biotinylated Cynomolgus FAP Protein, His,Avitag™, active dimer (MALS verified)

Catalog # FAP-C82Q5

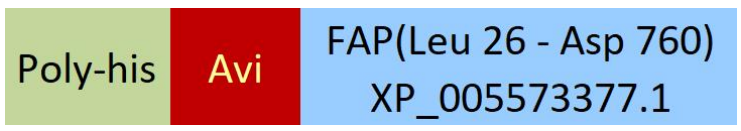
Synonym

FAP,FAPalpha,SIMP,Seprase,APCE

Source

Biotinylated Cynomolgus FAP, His,Avitag(FAP-C82Q5) is expressed from human 293 cells (HEK293). It contains AA Leu 26 - Asp 760 (Accession # XP_005573377.1).
Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 92.6 kDa. The protein migrates as 90-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 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

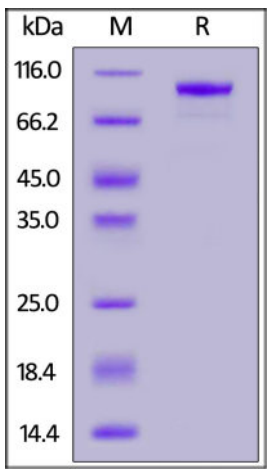
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

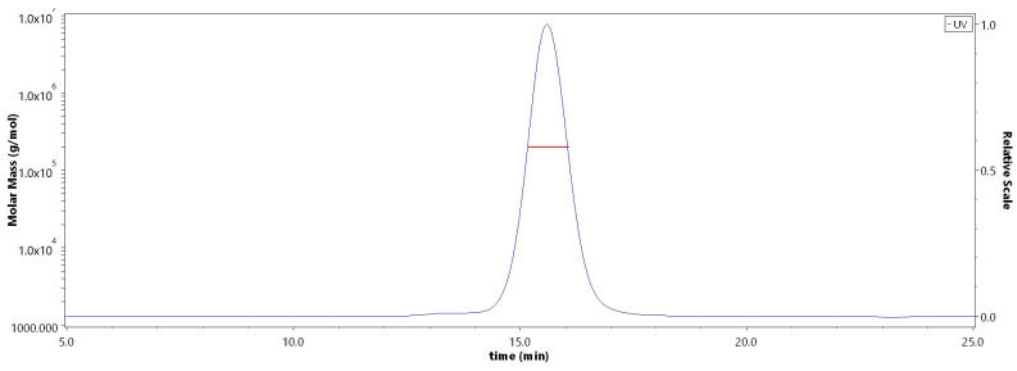
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



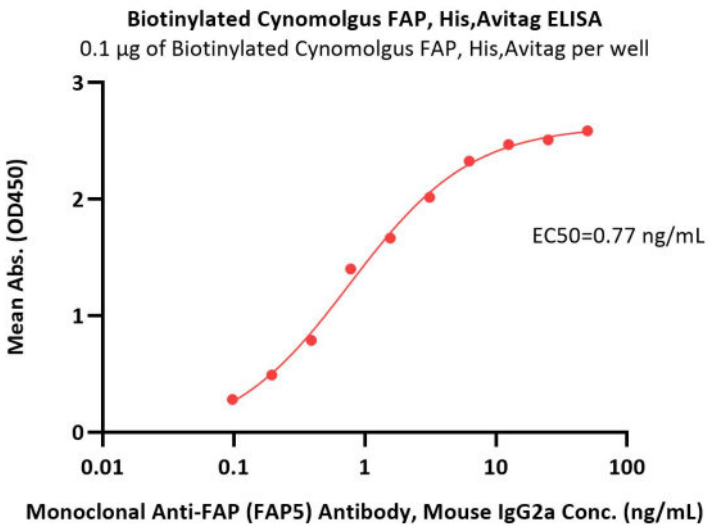
Biotinylated Cynomolgus FAP, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Biotinylated Cynomolgus FAP, His,Avitag (Cat. No. FAP-C82Q5) is more than 90% and the molecular weight of this protein is around 190-210 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Biotinylated Cynomolgus FAP, His,Avitag (Cat. No. FAP-C82Q5) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Monoclonal Anti-FAP (FAP5) Antibody, Mouse IgG2a with a linear range of 0.1-2 ng/mL (QC tested).

Bioactivity

Measured by its ability to convert the substrate benzyloxycarbonyl-Gly-Pro-7-amido-4-methylcoumarin (Z-GP-AMC) to Z-Gly-Pro and 7-amino-4-methylcoumarin (AMC). The specific activity is >5500 pmol/min/μg (QC tested).

Background

FAP (also known as seprase) is a Type II transmembrane serine protease. Both plasma membrane and soluble forms exhibit post-proline cleaving endopeptidase activity, with a marked preference for Ala/Ser-Gly-Pro-Ser/Asn/Ala consensus sequences. Degrade also gelatin, heat-denatured type I collagen. Also has dipeptidyl peptidase activity, with a preference for Ala-Pro, Ile-Pro, Gly-Pro, Arg-Pro and Pro-Pro. The plasma membrane form, in association with either DPP4, PLAUR or integrins, is involved in the pericellular proteolysis of the extracellular matrix (ECM), and hence promotes cell adhesion, migration and invasion through the ECM. Promotes glioma cell invasion through the brain parenchyma by degrading the proteoglycan brevican. Acts as a tumor suppressor in melanocytic cells through regulation of cell proliferation and survival in a serine protease activity-independent manner.

Clinical and Translational Updates