

Biotinylated Human PTK7 / CCK4 protein, His,Avitag™ (MALS verified)

Catalog # PT7-H82E5



Synonyms

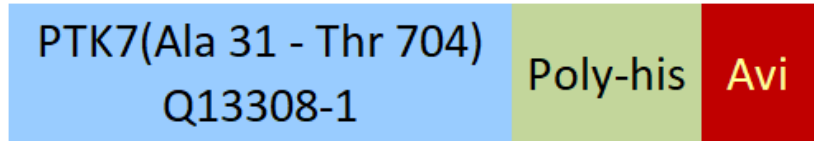
PTK7, CCK4, CCK-4, Tyrosine-protein kinase-like 7, Protein-tyrosine kinase 7, Protein-tyrosine kinase 7

Source

Biotinylated Human PTK7, His,Avitag (PT7-H82E5) is expressed from human 293 cells (HEK293). It contains AA Ala 31 - Thr 704 (Accession # [Q13308-1](#)).

Predicted N-terminus: Ala 31

Molecular Characterization



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

The protein has a calculated MW of 78.2 kDa. The protein migrates as 105-115 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.

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 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

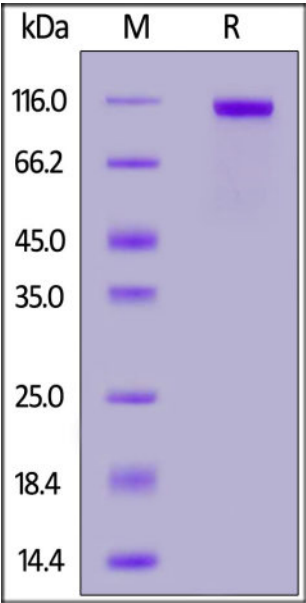
This product is stable after storage at:

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

ACRO Quality Management System

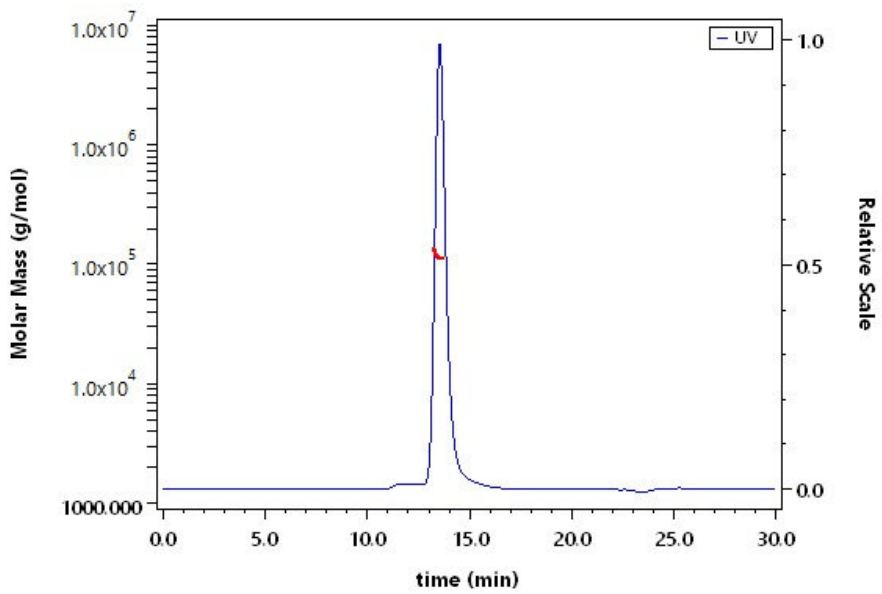
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



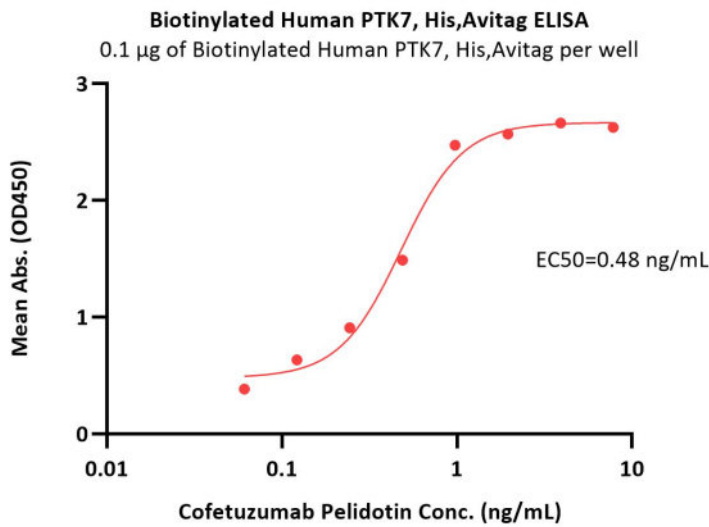
Biotinylated Human PTK7, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Biotinylated Human PTK7, His,Avitag (Cat. No. PT7-H82E5) is more than 95% and the molecular weight of this protein is around 95-130 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Biotinylated Human PTK7, His,Avitag (Cat. No. PT7-H82E5) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Cofetuzumab Pelidotin with a linear range of 0.06-1 ng/mL (QC tested).

Bioactivity-SPR



Cofetuzumab captured on Protein A Chip can bind Biotinylated Human PTK7, His,Avitag (Cat. No. PT7-H82E5) with an affinity constant of 4.88 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

PTK7, highly expressed in lung, liver, pancreas, kidney, placenta and melanocytes. Weakly expressed in thyroid gland, ovary, brain, heart and skeletal muscle. Also expressed in erythroleukemia cells. Inactive tyrosine kinase involved in Wnt signaling pathway. Component of both the non-canonical (also known as the Wnt/planar

cell polarity signaling) and the canonical Wnt signaling pathway. Functions in cell adhesion, cell migration, cell polarity, proliferation, actin cytoskeleton reorganization and apoptosis. Has a role in embryogenesis, epithelial tissue organization and angiogenesis.



www.acrobiosystems.com