

Synonym

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

Source

Rat PTK7, Fc Tag (PT7-R5255) is expressed from human 293 cells (HEK293). It contains AA Ala 23 - Gln 695 (Accession # [NP_001382670.1](#)).

Predicted N-terminus: Ala 23

Molecular Characterization

| | |
|--|---------------------------------|
| PTK7(Ala 23 - Gln 695) NP_001382670.1 | Fc(Pro 100 - Lys 330) P01857 |
|--|---------------------------------|

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

The protein has a calculated MW of 100.7 kDa. The protein migrates as 120-140 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 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, 25 mM Arginine, 150 mM NaCl, pH7.5. 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.

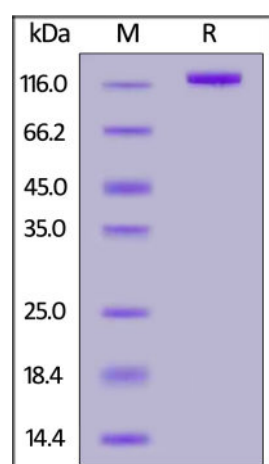
Storage

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

Rat PTK7, 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%.

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.

Clinical and Translational Updates

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