Genomeditech (Shanghai) Co.,Ltd.
Order: 021-68455258/50432826/50432825
Toll-free: 400 627 9288
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# Human PTK7 Protein; His Tag

## Product Information

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|---|---|
| **Product Name** | Human PTK7 Protein; His Tag |
| **Storage temp** | Store at ≤ -70℃, stable for 6 months after receipt.<br>Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |
| **Catalog# / Size** | **GM-88572RP-100 / 100 μg**<br>**GM-88572RP-1000 / 1 mg** |

## Protein Information

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| **Alternative Names** | CCK4, CCK-4, Tyrosine-protein kinase-like 7, Protein-tyrosine kinase 7, Protein-tyrosine kinase 7 |
| **Source** | Human PTK7 Protein; His Tag (GM-88572RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 31 - Thr 704 (Accession # Q13308-1).<br>This protein carries a His tag at the C-terminus. |
| **Purity** | > 95% as determined by SDS-PAGE |
| **Endotoxin** | < 1 EU/μg, determined by LAL gel clotting assay |
| **Predicted Mol Mass** | 75.4 KDa |
| **Formulation** | Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4. |
| **Description** | PTK7 protein (Protein Tyrosine Kinase 7), also known as Colon Carcinoma Kinase-4 (CCK-4), is a catalytically defective receptor tyrosine kinase that belongs to the receptor tyrosine kinase (RTK) superfamily. It is encoded by the PTK7 gene and is a protein associated with the human immune system and embryonic development. PTK7 protein was initially discovered in colon carcinoma cells and later detected in various normal tissues, including the central nervous system, hematopoietic stem cells, and immune cells.<br>PTK7 protein regulates the activity of T cells and other immune cells by binding to its co-receptors or interacting with components of the planar cell polarity (PCP) pathway, although its primary ligand remains to be fully elucidated. PTK7 functions as a Wnt co-receptor and plays a role in cell migration, polarity, and immune synapse formation.<br>Research indicates that PTK7 protein plays a significant role in regulating T cell activity, promoting cell migration, and modulating immune responses. Additionally, the aberrant expression of PTK7 protein is associated with tumor development, including colon cancer, breast cancer, lung cancer, and acute myeloid leukemia (AML), as well as with poor prognosis and metastasis, making it a potential target for immunotherapy, including antibody-drug conjugates (ADCs), CAR-T cell therapy, and targeted cancer therapies. |

Version:4.0

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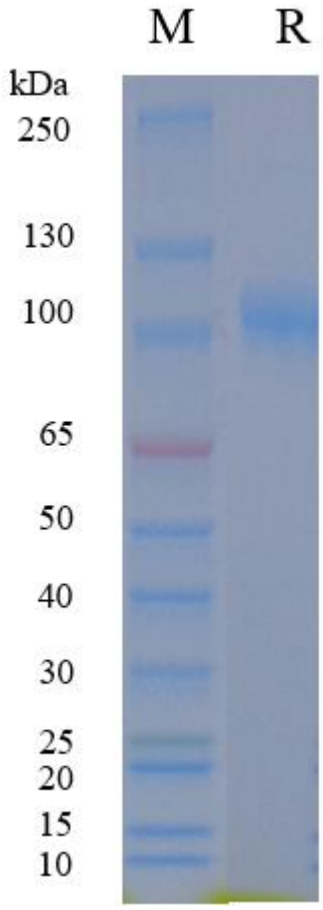
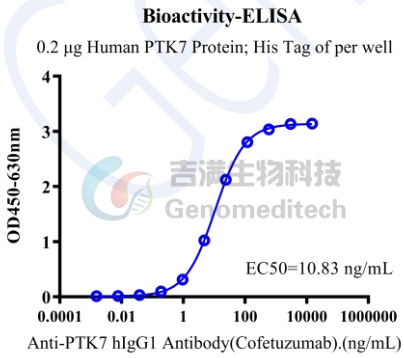
## SDS-PAGE




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




Human PTK7 Protein; His Tag (Catalog # GM-88572RP) was immobilized at 2 μg/ml (100 μL/well). Increasing concentrations of Anti-PTK7 hIgG1 Antibody (Cofetuzumab) (Catalog # GM-56186AB) were added.

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