

Datasheet for ABIN7555086  
**PTK6 Protein (AA 1-451) (His tag)**



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## Overview

Quantity:	1 mg
Target:	PTK6
Protein Characteristics:	AA 1-451
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTK6 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Purpose:	Custom-made recombinat PTK6 Protein expressed in mammalian cells.
Sequence:	<p>MVSRDQAHLG PKYVGLWDFK SRTDEELSFR AGDVFHVARK EEQWWATLL DEAGGAVAQG  YVPHNYLAER ETVESEPWFF GCISRSEAVR RLQAEGNATG AFLIRVSEKP SADYVLSVRD  TQAVRHYKIW RRAGGRHLN EAVSFLSLPE LVNYHRAQSL SHGLRLAAPC RKHEPEPLPH  WDDWERPREE FTLCRKLGSF YFGEVFEGLW KDRVQVAIKV ISRDNLLHQQ MLQSEIQAMK  KLRHKHILAL YAVVSVGDPV YITELMAKG SLELLLRDSD EKVLPVSELL DIAWQVAEGM  CYLESQNYIH RDLAARNILV GENTLCKVGD FGLARLIKED VYLSHDHNIP YKWTAPPEALS  RGHYSTKSDV WSFGILLHEM FSRGQVPYPG MSNHEAFLRV DAGYRMPCL ECPPSVHKLM  LTCWCRDPEQ RPCFKALRER LSSFTSYENP T</p> <p><b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>

## Product Details

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### Characteristics:

### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

### Grade:

custom-made

## Target Details

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### Target:

PTK6

### Alternative Name:

PTK6 ([PTK6 Products](#))

### Background:

Protein-tyrosine kinase 6 (EC 2.7.10.2) (Breast tumor kinase) (Tyrosine-protein kinase BRK), FUNCTION: Non-receptor tyrosine-protein kinase implicated in the regulation of a variety of signaling pathways that control the differentiation and maintenance of normal epithelia, as well as tumor growth. Function seems to be context dependent and differ depending on cell type, as well as its intracellular localization. A number of potential nuclear and cytoplasmic substrates have been identified. These include the RNA-binding proteins: KHDRBS1/SAM68, KHDRBS2/SLM1, KHDRBS3/SLM2 and SFPQ/PSF, transcription factors: STAT3 and STAT5A/B and a variety of signaling molecules: ARHGAP35/p190RhoGAP, PXN/paxillin, BTK/ATK, STAP2/BKS. Associates also with a variety of proteins that are likely upstream of PTK6 in various signaling pathways, or for which PTK6 may play an adapter-like role. These proteins include ADAM15, EGFR, ERBB2, ERBB3 and IRS4. In normal or non-tumorigenic tissues, PTK6 promotes cellular differentiation and apoptosis. In tumors PTK6 contributes to cancer progression by sensitizing cells to mitogenic signals and enhancing proliferation, anchorage-

## Target Details

independent survival and migration/invasion. Association with EGFR, ERBB2, ERBB3 may contribute to mammary tumor development and growth through enhancement of EGF-induced signaling via BTK/AKT and PI3 kinase. Contributes to migration and proliferation by contributing to EGF-mediated phosphorylation of ARHGAP35/p190RhoGAP, which promotes association with RASA1/p120RasGAP, inactivating RhoA while activating RAS. EGF stimulation resulted in phosphorylation of PNX/Paxillin by PTK6 and activation of RAC1 via CRK/CrKII, thereby promoting migration and invasion. PTK6 activates STAT3 and STAT5B to promote proliferation. Nuclear PTK6 may be important for regulating growth in normal epithelia, while cytoplasmic PTK6 might activate oncogenic signaling pathways., FUNCTION: Isoform 2 inhibits PTK6 phosphorylation and PTK6 association with other tyrosine-phosphorylated proteins.

Molecular Weight: 51.8 kDa

UniProt: [Q13882](#)

## Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months