

Datasheet for ABIN7550768
PNKP Protein (AA 1-521) (His tag)



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Overview

Quantity:	1 mg
Target:	PNKP
Protein Characteristics:	AA 1-521
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PNKP protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PNKP Protein expressed in mammalian cells.
Sequence:	<p>MGEVEAPGRL WLESPGGAP PIFLPSDGQA LVLGRGPLTQ VTDRKCSRTQ VELVADPETR TVAVKQLGVN PSTTGTQELK PGLEGLGVG DTLYLVNGLH PLTLRWEETR TPESQPDTTP GTPLVSQDEK RDAELPKKRM RKSNPGWENL EKLLVFTAAG VKPQGKVAGF DLDGTLITTR SGKVFP TGPS DWRILYPEIP RKLRELEAEG YKLVIFTNQM SIGRGKLP AE EFKAKVEAVV EKLGVFPQVL VATHAGLYRK PVTGMWDHLQ EQANDGTPIS IGDSIFVGDA AGRPANWAPG RKKKDFSCAD RLFALNLGLP FATPEEFFLK WPAAGFELPA FDPRTVSRSG PLCLPESRAL LSASPEVVVA VGFPGAGKST FLKKHLVSAG YVHVNRDTLG SWQRCVTTCE TALKQGKRVA IDNTNPDAAS RARYVQCARA AGVPCRCFLF TATLEQARHN NRFREMTDSS HIPVSDMVMY GYRKQFEAPT LAEGFSAILE IPFRLWVEPR LGRLYCQFSE G 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.</p>

Product Details

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target: PNKP

Alternative Name: PNKP ([PNKP Products](#))

Background: Bifunctional polynucleotide phosphatase/kinase (DNA 5'-kinase/3'-phosphatase) (Polynucleotide kinase-3'-phosphatase) [Includes: Polynucleotide 3'-phosphatase (EC 3.1.3.32) (2'(3')-polynucleotidase), Polynucleotide 5'-hydroxyl-kinase (EC 2.7.1.78)],FUNCTION: Plays a key role in the repair of DNA damage, functioning as part of both the non-homologous end-joining (NHEJ) and base excision repair (BER) pathways (PubMed:10446192, PubMed:10446193, PubMed:15385968, PubMed:20852255, PubMed:28453785). Through its two catalytic activities, PNK ensures that DNA termini are compatible with extension and ligation by either removing 3'-phosphates from, or by phosphorylating 5'-hydroxyl groups on, the ribose sugar of the DNA backbone (PubMed:10446192, PubMed:10446193).
{ECO:0000269|PubMed:10446192, ECO:0000269|PubMed:10446193,
ECO:0000269|PubMed:15385968, ECO:0000269|PubMed:20852255,

Target Details

ECO:0000269|PubMed:28453785}.

Molecular Weight: 57.1 kDa

UniProt: [Q96T60](#)

Pathways: [DNA Damage Repair](#), [Nucleotide Phosphorylation](#)

Application Details

Application Notes: We expect the protein to work for functional studies. 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