Datasheet for ABIN3092973

HNRNPK Protein (AA 1-463) (His tag)

Overview

Quantity: 1 mg
Target: HNRNPK
Protein Characteristics: AA 1-463
Origin: Human
Source: Insect Cells
Protein Type: Recombinant
Purification tag / Conjugate: This HNRNPK protein is labelled with His tag.
Application: SDS-PAGE (SDS), ELISA, Western Blotting (WB), Crystallization (Crys)

Product Details

Sequence: METEQPEETF PNTETNGEG KRPAEDMEEE QAFKRSRNTD EMVELRILLQ SKNAGAVIGK GGKNIKALRT DYNASVSPD SSGPERILSI SADIETIGEI LKKIPTLEE GLQLPSPTAT SQLPLESDAV ECLNYQHYKG SDFDCELRLII IHQSLAGGII GVKGAKIKEL RENTQTTIKL FQECCPHSTD RVLIGGKPD RVVECIIIL DLISESPIKG RAQPYDPNFY DETYDYGGFT MMFDDRGRGP VGFPMRGRGG FDRMPPGRGG RPMPPSSRDY DDMPRRQGPP PPPGRGGRG GSRARNPLLP PPPPRGDL MAYDRRRPG DRYDGMOVFS ADETWDSAID TWSPSEWQMA YEPQGGSYD YSYAGGRGSY GDLGGPIITT QVTIJKDLAG SIIGKGGQRI KQIRHESGAS IKIDEPLEGS EDRIITITGT QDOIQNAQYL LQNSVKQYSY KFF

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
- Human HNRNPK Protein (raised in Insect Cells) purified by multi-step, protein-specific
Product Details

- Process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

### Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

### Sterility:

0.22 μm filtered

### Endotoxin Level:

Protein is endotoxin free.

### Grade:

Crystallography grade

Target Details

<table>
<thead>
<tr>
<th>Target</th>
<th>HNRNPK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Name</td>
<td>HNRNPK (HNRNPK Products)</td>
</tr>
</tbody>
</table>
Target Details

**Background:** One of the major pre-mRNA-binding proteins. Binds tenaciously to poly(C) sequences. Likely to play a role in the nuclear metabolism of hnRNAs, particularly for pre-mRNAs that contain cytidine-rich sequences. Can also bind poly(C) single-stranded DNA. Plays an important role in p53/TP53 response to DNA damage, acting at the level of both transcription activation and repression. When sumoylated, acts as a transcriptional coactivator of p53/TP53, playing a role in p21/CDKN1A and 14-3-3 sigma/SFN induction (By similarity). As far as transcription repression is concerned, acts by interacting with long intergenic RNA p21 (lincRNA-p21), a non-coding RNA induced by p53/TP53. This interaction is necessary for the induction of apoptosis, but not cell cycle arrest. {ECO:0000250, ECO:0000269|PubMed:16360036, ECO:0000269|PubMed:20673990, ECO:0000269|PubMed:22825850}.

**Molecular Weight:** 51.9 kDa Including tag.

**UniProt:** P61978

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.

**Comment:** In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

**Restrictions:** For Research Use only

Handling

**Format:** Liquid

**Buffer:** 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value 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:** Unlimited (if stored properly)
Image 1. "Crystallography Grade" protein due to multi-step, protein-specific purification process