

Datasheet for ABIN7554173  
**KPNA1 Protein (AA 1-538) (His tag)**



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## Overview

Quantity:	1 mg
Target:	KPNA1
Protein Characteristics:	AA 1-538
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KPNA1 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant KPNA1 Protein expressed in mammalian cells.
Sequence:	<p>MTTPGKENFR LKSYKNKSLN PDEMRRRREE EGLQLRKQKR EEQLFKRRNV ATAEEETEEE VMSDGGFHEA QISNMEMAPG GVITSDMIEM IFSKSPEQQL SATQKFRKLL SKEPNPPIDE VISTPGVVAR FVEFLKRKEN CTLQFESAWV LTNIASGNSL QTRIVIQAGA VPFIPELLSS EFEDVQEQAV WALGNIAGDS TMCRDYVLDC NILPPLLQLF SKQNRLTMTR NAVWALS NLC RGKSPPEFA KVSPCLNVLS WLLFVSDTDV LADACWALSY LSDGPNDKIQ AVIDAGVCRR LVELLMHNDY KVVSPALRAV GNIVTGDDIQ TQVILNCSAL QSLLHLLSSP KESIKKEACW TISNITAGNR AQIQTVIDAN IFPALISILQ TAEFRTRKEA AWAITNATSG GSAEQIKYLV ELGCIKPLCD LLTVMSKIV QVALNGLENI LRLGEQEAKR NGTGINPYCA LIEEAYGLDK IEFLLQSHENQ EIYQKAFDLI EHYFGTEDED SSIAPQVDLN QQYIFQQCE APMEGFQL <b>Sequence without tag.</b></p> <p><b>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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**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.

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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.

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**Purity:** > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

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**Grade:** custom-made

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## Target Details

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**Target:** KPNA1

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**Alternative Name:** KPNA1 ([KPNA1 Products](#))

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**Background:** Importin subunit alpha-5 (Karyopherin subunit alpha-1) (Nucleoprotein interactor 1) (NPI-1) (RAG cohort protein 2) (SRP1-beta) [Cleaved into: Importin subunit alpha-5, N-terminally processed],FUNCTION: Functions in nuclear protein import as an adapter protein for nuclear receptor KPNA1 (PubMed:7892216, PubMed:8692858, PubMed:27713473). Binds specifically and directly to substrates containing either a simple or bipartite NLS motif (PubMed:7892216, PubMed:8692858, PubMed:27713473). Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNA1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism (PubMed:7892216, PubMed:27713473). At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases

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## Target Details

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Ran from importin (PubMed:7892216). The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus (PubMed:7892216). {ECO:0000269|PubMed:27713473, ECO:0000269|PubMed:7892216, ECO:0000269|PubMed:8692858}., FUNCTION: (Microbial infection) In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS. {ECO:0000269|PubMed:12610148}.

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Molecular Weight: 60.2 kDa

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UniProt: [P52294](#)

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Pathways: [M Phase](#), [Protein targeting to Nucleus](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months