

# **Product datasheet for TP308803**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### KPNA2 (NM\_002266) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human karyopherin alpha 2 (RAG cohort 1, importin alpha 1) (KPNA2),

20 µg

Species: Human Expression Host: HEK293T

**Expression cDNA Clone** >RC208803 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSTNENANTPAARLHRFKNKGKDSTEMRRRRIEVNVELRKAKKDDQMLKRRNVSSFPDDATSPLQENRNN QGTVNWSVDDIVKGINSSNVENQLQATQAARKLLSREKQPPIDNIIRAGLIPKFVSFLGRTDCSPIQFES AWALTNIASGTSEQTKAVVDGGAIPAFISLLASPHAHISEQAVWALGNIAGDGSVFRDLVIKYGAVDPLL ALLAVPEMSSLACGYLRNLTWTLSNLCRNKNPAPPIDAVEQILPTLVRLLHHDDPEVLADTCWAISYLTD GPNERIGMVVKTGVVPQLVKLLGASELPIVTPALRAIGNIVTGTDEQTQVVIDAGALAVFPSLLTNPKTN IQKEATWTMSNITAGRQDQIQQVVNHGLVPFLVSVLSKADFKTQKEAVWAVTNYTSGGTVEQIVYLVHCG

IIEPLMNLLTAKDTKIILVILDAISNIFQAAEKLGETEKLSIMIEECGGLDKIEALQNHENESVYKASLS

LIEKYFSVEEEEDQNVVPETTSEGYTFQVQDGAPGTFNF

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK
Predicted MW: 57.7 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.





RefSeq ORF:

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Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 002257

 Locus ID:
 3838

 UniProt ID:
 P52292

 RefSeq Size:
 2011

 Cytogenetics:
 17q24.2

Synonyms: IPOA1; QIP2; RCH1; SRP1-alpha; SRP1alpha

1587

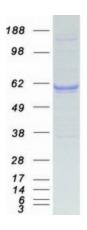
**Summary:** The import of proteins into the nucleus is a process that involves at least 2 steps. The first is an

energy-independent docking of the protein to the nuclear envelope and the second is an energy-dependent translocation through the nuclear pore complex. Imported proteins require a nuclear localization sequence (NLS) which generally consists of a short region of basic amino acids or 2 such regions spaced about 10 amino acids apart. Proteins involved in the first step of nuclear import have been identified in different systems. These include the Xenopus protein importin and its yeast homolog, SRP1 (a suppressor of certain temperature-sensitive mutations of RNA polymerase I in Saccharomyces cerevisiae), which bind to the NLS. KPNA2 protein interacts with the NLSs of DNA helicase Q1 and SV40 T antigen and may be involved in the nuclear transport of proteins. KPNA2 also may play a role in V(D)J recombination. Alternative

splicing results in multiple transcript variants. [provided by RefSeq, Feb 2016]

**Protein Families:** Druggable Genome, Stem cell - Pluripotency

## **Product images:**



Coomassie blue staining of purified KPNA2 protein (Cat# TP308803). The protein was produced from HEK293T cells transfected with KPNA2 cDNA clone (Cat# [RC208803]) using MegaTran 2.0 (Cat# [TT210002]).