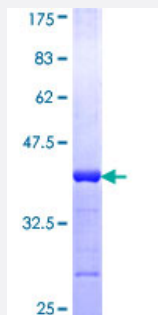


KPNA2 (Human) Recombinant Protein (Q01)

Catalog # H00003838-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human KPNA2 partial ORF (NP_002257, 420 a.a. - 528 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	GII EPLMNLLTAKDTKILVILDAISNIFQAAENLGETEKL SIMIEECGGLDKIEALQNHENESVYKASLS LIEKYFSVEEEEEDQNVVPETTSEGYTFQVQDGAPGTFN
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.73
Interspecies Antigen Sequence	Mouse (94); Rat (94)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — KPNA2

Entrez GeneID [3838](#)

GeneBank Accession# [NM_002266](#)

Protein Accession# [NP_002257](#)

Gene Name KPNA2

Gene Alias IPOA1, QIP2, RCH1, SRP1alpha

Gene Description karyopherin alpha 2 (RAG cohort 1, importin alpha 1)

Omim ID [600685](#)

Gene Ontology [Hyperlink](#)

Gene 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 [provided by RefSeq]

Other Designations RAG cohort 1|importin alpha 1|importin alpha 2|importin-alpha-P1|karyopherin alpha 2|pendulin

Disease

- [Breast Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Ovarian Neoplasms](#)