



## KPNA2 peptide (DAG-P0691)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

#### Antigen Description

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, Jul 2008]

<b>Specificity</b>	Expressed ubiquitously.
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the importin alpha family. Contains 10 ARM repeats. Contains 1 IBB domain.
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

<b>Gene Name</b>	<a href="#">KPNA2 karyopherin alpha 2 (RAG cohort 1, importin alpha 1) [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	KPNA2

<b>Synonyms</b>	KPNA2; karyopherin alpha 2 (RAG cohort 1, importin alpha 1); QIP2; RCH1; IPOA1; SRP1alpha; importin subunit alpha-1; pendulin; SRP1-alpha; RAG cohort 1; importin alpha 1; importin alpha 2; importin-alpha-P1; RAG cohort protein 1; importin subunit alpha-2; karyopherin subunit alpha-2;
<b>Entrez Gene ID</b>	<a href="#">3838</a>
<b>mRNA Refseq</b>	<a href="#">NM_002266.2</a>
<b>Protein Refseq</b>	<a href="#">NP_002257.1</a>
<b>UniProt ID</b>	P52292
<b>Chromosome Location</b>	17q24.2
<b>Pathway</b>	Antiviral mechanism by IFN-stimulated genes, organism-specific biosystem; Cytokine Signaling in Immune system, organism-specific biosystem; ISG15 antiviral mechanism, organism-specific biosystem; Immune System, organism-specific biosystem; Influenza A, organism-specific biosystem; Influenza A, conserved biosystem; Interferon Signaling, organism-specific biosystem; Regulation of cytoplasmic and nuclear SMAD2/3 signaling, organism-specific biosystem; Role of Calcineurin-dependent NFAT signaling in
<b>Function</b>	histone deacetylase binding; nuclear localization sequence binding; poly(A) RNA binding; protein binding; protein transporter activity;