



# KPNA2 blocking peptide (CDBP5652)

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]

**Conjugate** Unconjugated

**Applications** Used as a blocking peptide in immunoblotting applications.

**Format** Liquid

**Concentration** 200 µg/mL

**Size** 0.05 mg

**Preservative** None

**Storage** -20°C

## GENE INFORMATION

**Gene Name** [KPNA2 karyopherin alpha 2 \(RAG cohort 1, importin alpha 1\) \[ Homo sapiens \(human\) \]](#)

**Official Symbol** 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</a>
<b>Protein Refseq</b>	<a href="#">NP_002257</a>
<b>UniProt ID</b>	P52292
<b>Pathway</b>	Antiviral mechanism by IFN-stimulated genes; Cytokine Signaling in Immune system; ISG15 antiviral mechanism; Immune System; Influenza A; Interferon Signaling; Regulation of cytoplasmic and nuclear SMAD2/3 signaling; Role of Calcineurin-dependent NFAT signaling in lymphocytes
<b>Function</b>	histone deacetylase binding; nuclear localization sequence binding; poly(A) RNA binding; protein binding; protein transporter activity