



# Recombinant Human Importin subunit alpha-1 (KPNA2)

<b>Product Code</b>	CSB-EP012484HU-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P52292
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>STNENANTP AARLHRFKNK GKDSTEMRRR RIEVNVELRK AKKDDQMLKR            RNVSSFPDDA TSPLQENRNN QGTVNWSVDD IVKGINSSNV ENQLQATQAA            RKLLSREKQP PIDNIIRAGL IPKFVSFLGR TDCSPIQFES AWALTNIASG            TSEQTKAVVD GGAIPAFISL LASPHAHISE QAVWALGNIA GDGSVFRDLV            IKYGAVDPLL ALLAVPDMSS LACGYLRNLT WTLNLCRNK NPAPPIDAVE            QILPTLVRLH HHDDPEVLAD TCWAISYLTG GPNERIGMVV KTGVPVQLVK            LLGASELPIV TPALRAIGNI VTGTDEQTQV VIDAGALAVF PSLLTNPKTN            IQKEATWTMS NITAGRQDQI QQVVNHGLVP FLVSVLSKAD FKTQKEAVWA            VTNYTSGGTV EQIVYLVHCG IIEPLMNLIT AKDTKIILVI LDAISNIFQA            AEKLGETEKL SIMIEECGGL DKIEALQNHE NESVYKASLS LIEKYFSVEE            EEDQNVVPET TSEGYTFQVQ DGAPGTFNF</p>
<b>Source</b>	E.coli
<b>Target Names</b>	KPNA2
<b>Protein Names</b>	Recommended name: Importin subunit alpha-2 Alternative name(s): Karyopherin subunit alpha-2 RAG cohort protein 1 SRP1-alpha
<b>Expression Region</b>	2-529
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	<p>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 <i>Saccharomyces cerevisiae</i>), 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</p>



transport of proteins. KPNA2 also may play a role in V(D)J recombination

---

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

---

**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.