

IPO8 Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP5435a**Specification**

IPO8 Blocking Peptide (N-term) - Product Information

Primary Accession [O15397](#)
Other Accession [Q7TMY7](#), [NP_006381.2](#)

IPO8 Blocking Peptide (N-term) - Additional Information

Gene ID 10526

Other Names

Importin-8, Imp8, Ran-binding protein 8, RanBP8, IPO8, RANBP8

Target/Specificity

The synthetic peptide sequence is selected from aa 83-94 of HUMAN IPO8

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IPO8 Blocking Peptide (N-term) - Protein Information

Name IPO8

Synonyms RANBP8

Function

Involved in nuclear protein import, either by acting as autonomous nuclear transport receptor or as an adapter-like protein in association with the importin-beta subunit KPNB1. Acting autonomously, may serve as receptor for nuclear localization signals (NLS) and promote translocation of import substrates through the nuclear pore complex (NPC) by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin, the importin/substrate complex dissociates and importin is re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus (PubMed:9214382). In vitro mediates the nuclear import of the signal recognition particle protein SRP19 (PubMed:11682607). May also be involved in cytoplasm-to-nucleus shuttling of a

broad spectrum of other cargos, including Argonaute- microRNAs complexes, the JUN protein, RELA/NF-kappa-B p65 subunit, the translation initiation factor EIF4E and a set of receptor-activated mothers against decapentaplegic homolog (SMAD) transcription factors that play a critical role downstream of the large family of transforming growth factor beta and bone morphogenetic protein (BMP) cytokines (Probable).

Cellular Location

Cytoplasm. Nucleus.

IPO8 Blocking Peptide (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

IPO8 Blocking Peptide (N-term) - Images**IPO8 Blocking Peptide (N-term) - Background**

The importin-alpha/beta complex and the GTPase Ran mediate nuclear import of proteins with a classical nuclear localization signal. The protein encoded by this gene is a member of a class of approximately 20 potential Ran targets that share a sequence motif related to the Ran-binding site of importin-beta. This protein binds to the nuclear pore complex and, along with RanGTP and RANBP1, inhibits the GAP stimulation of the Ran GTPase. [provided by RefSeq].

IPO8 Blocking Peptide (N-term) - References

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Gorlich, D., et al. J. Cell Biol. 138(1):65-80(1997)