

XPO5 Antibody (C-term) Blocking Peptide

Synthetic peptide

Catalog # BP16050b

Specification

XPO5 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

[Q9HAV4](#)**XPO5 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 57510

Other Names

Exportin-5, Exp5, Ran-binding protein 21, XPO5, KIAA1291, RANBP21

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.

XPO5 Antibody (C-term) Blocking Peptide - Protein Information

Name XPO5

Synonyms KIAA1291, RANBP21

Function

Mediates the nuclear export of proteins bearing a double-stranded RNA binding domain (dsRBD) and double-stranded RNAs (cargos). XPO5 in the nucleus binds cooperatively to the RNA and to the GTPase Ran in its active GTP-bound form. Proteins containing dsRBDs can associate with this trimeric complex through the RNA. Docking of this complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause disassembly of the complex and release of the cargo from the export receptor. XPO5 then returns to the nuclear compartment by diffusion through the nuclear pore complex, to mediate another round of transport. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Overexpression may in some circumstances enhance RNA-mediated gene silencing (RNAi). Mediates nuclear export of isoform 5 of ADAR/ADAR1 in a RanGTP-dependent manner. (Microbial infection) Mediates the nuclear export of adenovirus VA1 dsRNA.

Cellular Location

Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm

Tissue Location

Expressed in heart, brain, placenta, lung, skeletal muscle, kidney and pancreas.

XPO5 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

XPO5 Antibody (C-term) Blocking Peptide - Images**XPO5 Antibody (C-term) Blocking Peptide - Background**

Exportin-5 belongs to a large family of karyopherins (seeMIM 602738) that mediate the transport of proteins and other cargobetween the nuclear and cytoplasmic compartments.[supplied byOMIM].

XPO5 Antibody (C-term) Blocking Peptide - References

Melo, S.A., et al. Cancer Cell 18(4):303-315(2010)Kim, J.S., et al. Mol. Carcinog. 49(10):913-921(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Wilker, E.H., et al. Environ. Health Perspect. 118(7):943-948(2010)Boni, V., et al. Pharmacogenomics J. (2010) In press
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