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XPOT Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7632a

Specification

XPOT Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O43592

XPOT Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 11260

Other Names
Exportin-T, Exportin(tRNA), tRNA exportin, XPOT

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7632a was selected from the N-term region of human XPOT. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

XPOT Antibody (N-term) Blocking Peptide - Protein Information

Name XPOT

Function
Mediates the nuclear export of aminoacylated tRNAs. In the nucleus binds to tRNA and to the GTPase Ran in its active GTP-bound form. Docking of this trimeric complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the tRNA from the export receptor. XPOT then return to the nuclear compartment and 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.

Cellular Location
Nucleus. Cytoplasm. Note=Nuclear, once bound to tRNA and Ran the complex translocates to the cytoplasm. Shuttles between the nucleus and the cytoplasm

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XPOT Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

XPOT Antibody (N-term) Blocking Peptide - Images

XPOT Antibody (N-term) Blocking Peptide - Background

XPOT is a protein belonging to the RAN-GTPase exportin family that mediates export of tRNA from the nucleus to the cytoplasm. Translocation of tRNA to the cytoplasm occurs once exportin has bound both tRNA and GTP-bound RAN.

XPOT Antibody (N-term) Blocking Peptide - References

Li,S. , RNA Biol 3 (4), 145-149 (2006)Suzuki,T., Biomed. Res. 27 (2), 89-92 (2006)Kuersten,S., Mol. Cell. Biol. 22 (16), 5708-5720 (2002)