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XPO1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6758b

Specification

XPO1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O14980

XPO1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 7514

Other Names
Exportin-1, Exp1, Chromosome region maintenance 1 protein homolog, XPO1, CRM1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6758b was selected from the C-term region of human XPO1. 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.

XPO1 Antibody (C-term) Blocking Peptide - Protein Information

Name XPO1

Synonyms CRM1

Function
Mediates the nuclear export of cellular proteins (cargos) bearing a leucine-rich nuclear export signal (NES) and of RNAs. In the nucleus, in association with RANBP3, binds cooperatively to the NES on its target protein and to the GTPase RAN in its active GTP-bound form (Ran-GTP). 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, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the cargo from the export receptor. 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. Involved in U3 snoRNA transport from Cajal bodies to nucleoli. Binds to late precursor U3 snoRNA bearing a TMG cap.

Cellular Location
Cytoplasm. Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus, nucleolus. Note=Located in the nucleoplasm, Cajal bodies and nucleoli. Shuttles between the nucleus/nucleolus and the cytoplasm

Tissue Location
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney.

XPO1 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

XPO1 Antibody (C-term) Blocking Peptide - Images

XPO1 Antibody (C-term) Blocking Peptide - Background

XPO1 mediates leucine-rich nuclear export signal (NES)-dependent protein transport. It inhibits the nuclear export of Rev and U snRNAs. It is involved in the control of several cellular processes by controlling the localization of cyclin B, MPAK, and MAPKAP kinase. This protein also regulates NFAT and AP-1.

XPO1 Antibody (C-term) Blocking Peptide - References

Shen,A., et.al., Neurosurgery 65 (1), 153-159 (2009)