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XPO1 / CRM1 Antibody (aa390-408)

Rabbit Polyclonal Antibody
Catalog # ALS11910

Specification

XPO1 / CRM1 Antibody (aa390-408) - Product Information

Application	**WB, IHC**
Primary Accession	O14980
Reactivity	**Human, Monkey, Chicken, Horse, Xenopus, Bovine, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**123kDa KDa**

XPO1 / CRM1 Antibody (aa390-408) - Additional Information

Gene ID 7514

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

Target/Specificity
Amino acids 390-408 (ASPLLSGSQHFDVPPRRQL) of human Exportin-1 protein

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
XPO1 / CRM1 Antibody (aa390-408) is for research use only and not for use in diagnostic or therapeutic procedures.

XPO1 / CRM1 Antibody (aa390-408) - 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

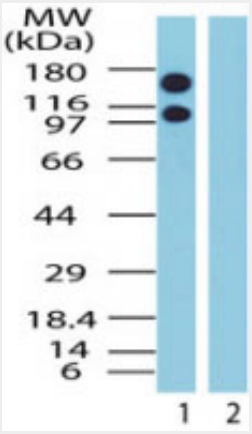
Tissue Location
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney.

XPO1 / CRM1 Antibody (aa390-408) - Protocols

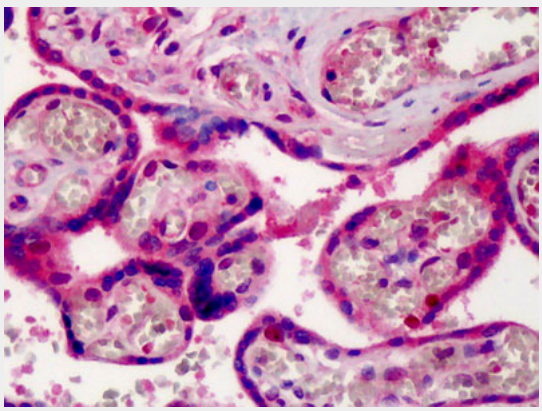
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

XPO1 / CRM1 Antibody (aa390-408) - Images



Western blot of Exportin-1 in Jurkat cell lysate in the 1) absence and 2) presence of immunizing...



Anti-CRM1 antibody IHC of human placenta.

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XPO1 / CRM1 Antibody (aa390-408) - Background

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. Several viruses, among them HIV-1, HTLV-1 and influenza A use it to export their unspliced or incompletely spliced RNAs out of the nucleus. Interacts with, and mediates the nuclear export of HIV-1 Rev and HTLV-1 Rex proteins. Involved in HTLV-1 Rex multimerization.

XPO1 / CRM1 Antibody (aa390-408) - References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
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