

### XPO1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6684B

### Specification

# XPO1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>014980</u> <u>080U96</u>, <u>06P5F9</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 817-846

# XPO1 Antibody (C-term) - Additional Information

Gene ID 7514

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

#### Target/Specificity

This XPO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 817-846 amino acids from the C-terminal region of human XPO1.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

XPO1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# XPO1 Antibody (C-term) - 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**

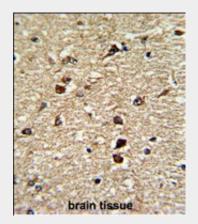
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney.

# XPO1 Antibody (C-term) - Protocols

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

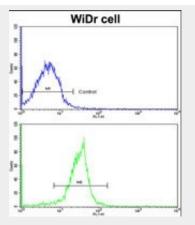
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### XPO1 Antibody (C-term) - Images



Formalin-fixed and paraffin-embedded human brain tissue reacted with XPO1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of widr cells using XPO1 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# XPO1 Antibody (C-term) - Background

XPO1 mediates leucine-rich nuclear export signal (NES)-dependent protein transport. Exportin 1 specifically 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 2. This protein also regulates NFAT and AP-1.

# **XPO1 Antibody (C-term) - References**

Shen,A., Neurosurgery 65 (1), 153-159 (2009) Dong,X., Nat. Struct. Mol. Biol. 16 (5), 558-560 (2009) **XPO1 Antibody (C-term) - Citations** 

• <u>SARS-CoV 9b protein diffuses into nucleus. undergoes active Crm1 mediated</u> <u>nucleocytoplasmic export and triggers apoptosis when retained in the nucleus.</u>