10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

XPO4 Rabbit mAb

Catalog # AP75416

Product Information

Application	WB
Primary Accession	Q9C0E2
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	130139

Additional Information

Gene ID	64328
Other Names	XPO4
Dilution	WB~~1:1000-1:5000
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

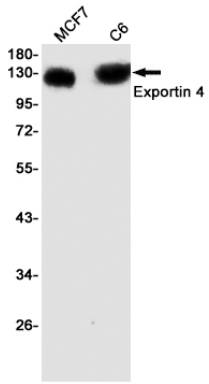
Name	XPO4 {ECO:0000303|PubMed:26787900, ECO:0000312|HGNC:HGNC:17796}
Function	Mediates the nuclear export of proteins (cargos), such as EIF5A, SMAD3 and isoform M2 of PKM (PKM2) (PubMed:10944119, PubMed:16449645, PubMed:26787900). In the nucleus binds cooperatively to its cargo and to the GTPase Ran in its active GTP-bound form. Docking of this trimeric complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins (PubMed:10944119, PubMed:16449645). 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 (PubMed:10944119, PubMed:16449645). XPO4 then return to the nuclear compartment and mediate another round of transport (PubMed:10944119, PubMed:16449645). 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 (PubMed:10944119, PubMed:16449645). Catalyzes the nuclear export of hypusinated EIF5A; a small cytoplasmic protein that

	enters nucleus and accumulates within nucleolus if not exported back by XPO4 (PubMed:10944119). Specifically mediates nuclear export of isoform M2 of PKM (PKM2) following PKM2 deacetylation by SIRT6 (PubMed:26787900). Also mediates the nuclear import of SOX transcription factors SRY and SOX2 (By similarity).
Cellular Location	Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm.

Background

Mediates the nuclear export of proteins (cargos) with broad substrate specificity. In the nucleus binds cooperatively to its cargo 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 cargo from the export receptor. XPO4 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.

Images



Western blot analysis of Exportin 4 in MCF-7, C6 lysates using XPO4 antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.