

Anti-Exportin-5 Picoband Antibody

Catalog # ABO12998

Product Information

Application	WB
Primary Accession	Q9HAV4
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Exportin-5(XPO5) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	57510
Other Names	Exportin-5, Exp5, Ran-binding protein 21, XPO5, KIAA1291, RANBP21
Calculated MW	136311
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus . Cytoplasm . Shuttles between the nucleus and the cytoplasm.
Tissue Specificity	Expressed in heart, brain, placenta, lung, skeletal muscle, kidney and pancreas. .
Source	Eukaryota
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Exportin-5 (2-43aa AMDQVNALCEQLVKAVTVMMDPNSTQRYRLEALKFCEEFEK), different from the related mouse sequence by four amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	XPO5
Synonyms	KIAA1291, RANBP21
Function	Mediates the nuclear export of proteins bearing a double- stranded RNA binding domain (dsRBD) and double-stranded RNAs (cargos). XPO5 in the nucleus binds cooperatively to the RNA and to the GTPase Ran in its active GTP-bound form. Proteins containing dsRBDs can associate with this trimeric complex through the RNA. 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, hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause disassembly of the complex and release of the cargo from the export receptor. XPO5 then returns to the nuclear compartment by diffusion through the nuclear pore complex, to 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. Overexpression may in some circumstances enhance RNA-mediated gene silencing (RNAi). Mediates nuclear export of isoform 5 of ADAR/ADAR1 in a RanGTP-dependent manner. (Microbial infection) Mediates the nuclear export of adenovirus VA1 dsRNA.
Cellular Location	Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm
Tissue Location	Expressed in heart, brain, placenta, lung, skeletal muscle, kidney and pancreas.

Background

Exportin-5 (XPO5) is a protein that in humans is encoded by the XPO5 gene. The International Radiation Hybrid Mapping Consortium mapped the XPO5 gene to chromosome 6. This gene encodes a member of the karyopherin family that is required for the transport of small RNAs and double-stranded RNA-binding proteins from the nucleus to the cytoplasm. The encoded protein translocates cargo through the nuclear pore complex in a RanGTP-dependent process.

Images

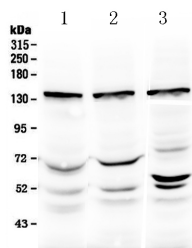


Figure 1. Western blot analysis of Exportin-5 using anti-Exportin-5 antibody (ABO12998).

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