

Anti-Exportin-5 Picoband Antibody

Catalog # ABO12998

Specification

Anti-Exportin-5 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionO9HAV4HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Exportin-5(XPO5) detection. Tested with WB inHuman;Mouse;Rat.

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

Anti-Exportin-5 Picoband Antibody - Additional Information

Gene ID 57510

Other Names Exportin-5, Exp5, Ran-binding protein 21, XPO5, KIAA1291, RANBP21

Calculated MW 136311 MW KDa

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.

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 AMDQVNALCEQLVKAVTVMMDPNSTQRYRLEALKFCEEFKEK), 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.

Anti-Exportin-5 Picoband Antibody - 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.

Anti-Exportin-5 Picoband Antibody - Protocols

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

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

Anti-Exportin-5 Picoband Antibody - Images





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