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Goat Anti-RANBP16 / Exportin 7 Antibody

Peptide-affinity purified goat antibody

Catalog # AF1908a

Specification

Goat Anti-RANBP16 / Exportin 7 Antibody - Product Information

Application	**WB**
Primary Accession	Q9UIA9
Other Accession	NP_001093632, 23039, 65246 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**123907**

Goat Anti-RANBP16 / Exportin 7 Antibody - Additional Information

Gene ID 23039

Other Names
Exportin-7, Exp7, Ran-binding protein 16, XPO7, KIAA0745, RANBP16

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-RANBP16 / Exportin 7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-RANBP16 / Exportin 7 Antibody - Protein Information

Name XPO7

Synonyms KIAA0745, RANBP16

Function
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. XPO7 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.

Cellular Location
Cytoplasm. Nucleus Note=Shuttles between the nucleus and the cytoplasm

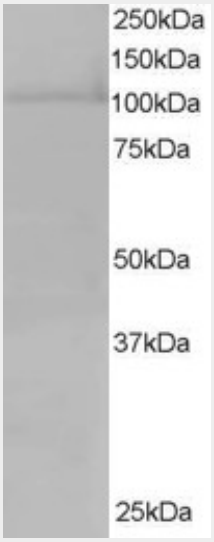
Tissue Location
Strong expression in testis, thyroid and bone marrow, low expression in lung, liver and small intestine, no expression in thymus, and remaining tissues studied have moderate expression. Expressed in red blood cells; overexpressed in red blood cells (cytoplasm) of patients with hereditary non-spherocytic hemolytic anemia of unknown etiology.

Goat Anti-RANBP16 / Exportin 7 Antibody - 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

Goat Anti-RANBP16 / Exportin 7 Antibody - Images



AF1908a staining (0.5 µg/ml) of Hela lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-RANBP16 / Exportin 7 Antibody - Background

The transport of protein and large RNAs through the nuclear pore complexes (NPC) is an energy-dependent and regulated process. The import of proteins with a nuclear localization signal

(NLS) is accomplished by recognition of one or more clusters of basic amino acids by the importin-alpha/beta complex; see MIM 600685 and MIM 602738. The small GTPase RAN (MIM 601179) plays a key role in NLS-dependent protein import. RAN-binding protein-16 is a member of the importin-beta superfamily of nuclear transport receptors.

Goat Anti-RANBP16 / Exportin 7 Antibody - References

STRADalpha regulates LKB1 localization by blocking access to importin-alpha, and by association with Crm1 and exportin-7. Dorfman J, et al. Mol Biol Cell, 2008 Apr. PMID 18256292.
Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.
A human protein-protein interaction network: a resource for annotating the proteome. Stelzl U, et al. Cell, 2005 Sep 23. PMID 16169070.
The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.
Exportin 7 defines a novel general nuclear export pathway. Mingot JM, et al. EMBO J, 2004 Aug 18. PMID 15282546.