

GEMIN4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20185a

Product Information

Application	WB, E
Primary Accession	P57678
Other Accession	NP_056536.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41821
Calculated MW	120037
Antigen Region	273-301

Additional Information

Gene ID	50628
Other Names	Gem-associated protein 4, Gemin-4, Component of gems 4, p97, GEMIN4
Target/Specificity	This GEMIN4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 273-301 amino acids from the N-terminal region of human GEMIN4.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	GEMIN4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GEMIN4
Function	The SMN complex catalyzes the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome, and thereby plays an important role in the splicing of cellular pre- mRNAs. Most

spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP (Sm core). In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A forming an intermediate. Binding of snRNA inside 5Sm triggers eviction of the SMN complex, thereby allowing binding of SNRPD3 and SNRPB to complete assembly of the core snRNP.

Cellular Location

Cytoplasm. Nucleus. Nucleus, nucleolus. Nucleus, gem. Note=Localized in subnuclear structures next to coiled bodies, called gems, which are highly enriched in spliceosomal snRNPs and in the nucleolus

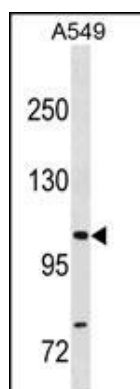
Background

The product of this gene is part of a large complex localized to the cytoplasm, nucleoli, and to discrete nuclear bodies called Gemini bodies (gems). The complex functions in spliceosomal snRNP assembly in the cytoplasm, and regenerates spliceosomes required for pre-mRNA splicing in the nucleus. The encoded protein directly interacts with a DEAD box protein and several spliceosome core proteins. Alternatively spliced transcript variants have been described, but their biological validity has not been determined.

References

- Kim, J.S., et al. Mol. Carcinog. 49(10):913-921(2010)
Wilker, E.H., et al. Environ. Health Perspect. 118(7):943-948(2010)
Boni, V., et al. Pharmacogenomics J. (2010) In press :
Clague, J., et al. Mol. Carcinog. 49(2):183-189(2010)
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Images



GEMIN4 Antibody (N-term) (Cat. #AP20185a) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the GEMIN4 antibody detected the GEMIN4 protein (arrow).

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