

Rabbit Anti-Gemin 5 antibody

SL20266R

Product Name:	Gemin 5
Chinese Name:	脊髓性肌萎缩症蛋白Gemin5抗体
Alias:	Gemin5; Gemin-5; gem (nuclear organelle) associated protein 5; Gem-associated protein 5; GEMIN5; GEMI5_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	169kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Gemin 5:401-500/1508
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Spinal muscular atrophy (SMA) is an autosomal recessive neurodegenerative disease characterized by loss of motor neurons in the spinal cord (1). SMA is caused by deletion or loss-of-function mutations in the SMN (Survival of Motor Neuron) gene (2). Gemin5, the protein product of human chromosome 5q33.3 (3), associates directly with SMN and is a part of the SMN complex containing Gemin2, Gemin3, Gemin4 and Gemin6 as well as several spliceosomal snRNP proteins (2,4). The SMN complex plays

an essential role in spliceosomal snRNP assembly in the cytoplasm and is required for pre-mRNA splicing of the nucleus (2). The SMN complex is found in both the cytoplasm and the nucleus (2). The nuclear form is concentrated in subnuclear bodies called gems (Gemini of the coiled bodies) (2,5,6). Gemin5 interacts with several snRNP core proteins including SmB, SmD1, SmD2, SmD3 and SmE (7). The amino terminal half of Gemin5 contains 13 WD repeat domains and a coiled-coil motif near the C-terminus (7).

Function:

Gemin 5 is part of a large macromolecular complex localized to both the cytoplasm and the nucleus that plays a role in the cytoplasmic assembly of small nuclear ribonucleoproteins (snRNPs). Other members of this complex include SMN, Gemin 2 (SIP1), Gemin 3 (DDX20), and Gemin 4.

Subunit:

Part of the core SMN complex that contains SMN1, SIP1/GEMIN2, DDX20/GEMIN3, GEMIN4, GEMIN5, GEMIN6, GEMIN7, GEMIN8 and STRAP/UNRIP. Interacts directly with SMN1, SNRPB, SNRPD1, SNRPD2, SNRPD3 and SNRPE.

Subcellular Location:

Nucleus, nucleoplasm. Nucleus, gem. Cytoplasm. Note=Found both in the nucleoplasm and in nuclear bodies called gems (Gemini of Cajal bodies) that are often in proximity to Cajal (coiled) bodies. Also found in the cytoplasm.

Similarity:

Belongs to the WD repeat gemin-5 family. Contains 13 WD repeats.

SWISS: Q8TEQ6

Gene ID: 25929

Database links:

Entrez Gene: 25929Human

Entrez Gene: 216766Mouse

SwissProt: Q8TEQ6Human

SwissProt: Q3UPH2Mouse

SwissProt: Q8BX17Mouse

Unigene: 483921Human

Unigene: 275349Mouse

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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