

Gemin 2 Rabbit mAb
Catalog # AP78461**Specification****Gemin 2 Rabbit mAb - Product Information**

Application	WB
Primary Accession	O14893
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	31585

Gemin 2 Rabbit mAb - Additional Information

Gene ID 8487

Other Names
GEMIN2**Dilution**
WB~~1/500-1/1000**Format**
Liquid**Gemin 2 Rabbit mAb - Protein Information****Name** GEMIN2 ([HGNC:10884](#))**Synonyms** SIP1**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 (PubMed: [18984161](http://www.uniprot.org/citations/18984161), PubMed: [9323129](http://www.uniprot.org/citations/9323129)). 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) (PubMed: [18984161](http://www.uniprot.org/citations/18984161)). In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG (5Sm) are trapped in an inactive 6S pICln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP (PubMed: [18984161](http://www.uniprot.org/citations/18984161)). To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A (PubMed: [18984161](http://www.uniprot.org/citations/18984161), PubMed: [9323129](http://www.uniprot.org/citations/9323129)). Binding of snRNA inside 5Sm ultimately triggers eviction of the SMN complex, thereby allowing binding of SNRPD3 and SNRPB to complete assembly of the core

snRNP (PubMed: [31799625](http://www.uniprot.org/citations/31799625) target="_blank">31799625). Within the SMN complex, GEMIN2 constrains the conformation of 5Sm, thereby promoting 5Sm binding to snRNA containing the snRNP code (a nonameric Sm site and a 3'-adjacent stem-loop), thus preventing progression of assembly until a cognate substrate is bound (PubMed: [16314521](http://www.uniprot.org/citations/16314521) target="_blank">16314521, PubMed: [21816274](http://www.uniprot.org/citations/21816274) target="_blank">21816274, PubMed: [31799625](http://www.uniprot.org/citations/31799625) target="_blank">31799625).

Cellular Location

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

Gemin 2 Rabbit mAb - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Gemin 2 Rabbit mAb - Images

