

Anti-Gemin 2 Rabbit Monoclonal Antibody
Catalog # ABO15993**Specification****Anti-Gemin 2 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IP
Primary Accession	O14893
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Gemin 2 Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

Anti-Gemin 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 8487

Other Names

Gem-associated protein 2, Gemin-2, Component of gems 2, Survival of motor neuron protein-interacting protein 1, SMN-interacting protein 1, GEMIN2 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=10884), SIP1

Calculated MW

31 kDa KDa

Application Details

WB 1:500-1:2000
IP 1:50

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Gemin 2

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Gemin 2 Rabbit Monoclonal Antibody - 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)). 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), PubMed:[21816274](http://www.uniprot.org/citations/21816274), PubMed:[31799625](http://www.uniprot.org/citations/31799625)).

Cellular Location

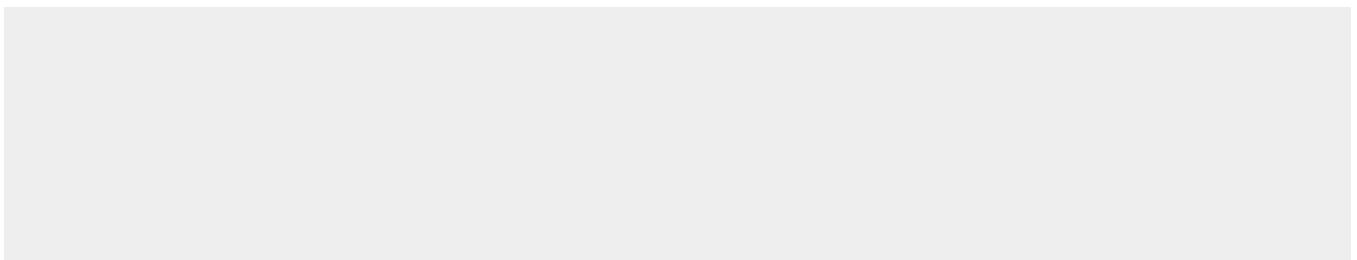
Nucleus, gem. Cytoplasm. Note=Localized in subnuclear structures next to coiled bodies, called gems, which are highly enriched in spliceosomal snRNPs. Also found in the cytoplasm

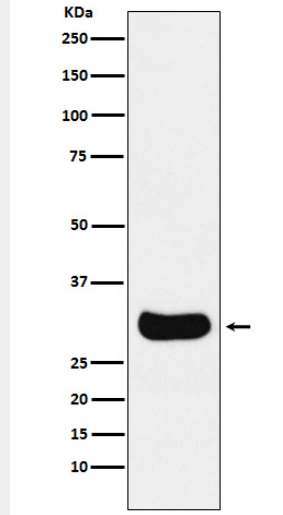
Anti-Gemin 2 Rabbit Monoclonal Antibody - Protocols

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

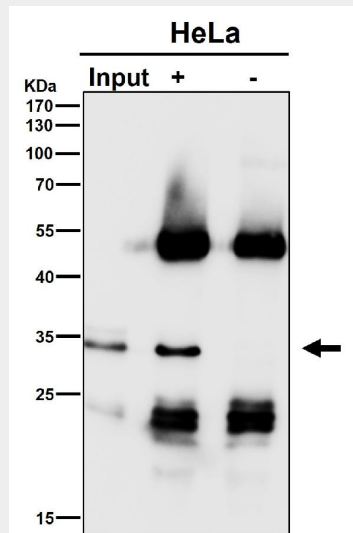
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Gemin 2 Rabbit Monoclonal Antibody - Images





Western blot analysis of Gemin 2 expression in HepG2 cell lysate.



Immunoprecipitate (IP) analysis using the Antibody at 1:50 dilution. (wb at 1:3K dilution)