

**Gemin 2 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54545**

## Specification

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### Gemin 2 Polyclonal Antibody - Product Information

Application	<b>WB, IHC-P</b>
Primary Accession	<a href="#">O14893</a>
Reactivity	<b>Rat, Pig</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>31585</b>

### Gemin 2 Polyclonal 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, SIP1

#### Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

### Gemin 2 Polyclonal 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)).

target="\_blank">18984161</a>, PubMed:<a href="http://www.uniprot.org/citations/9323129" target="\_blank">9323129</a>). 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:<a href="http://www.uniprot.org/citations/31799625" target="\_blank">31799625</a>). 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:<a href="http://www.uniprot.org/citations/16314521" target="\_blank">16314521</a>, PubMed:<a href="http://www.uniprot.org/citations/21816274" target="\_blank">21816274</a>, PubMed:<a href="http://www.uniprot.org/citations/31799625" target="\_blank">31799625</a>).

### Cellular Location

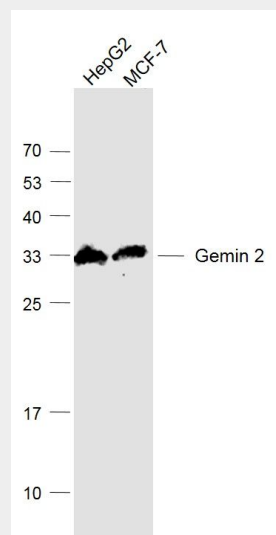
Nucleus, gem. Cytoplasm. Note=Localized in subnuclear structures next to coiled bodies, called gems, which are highly enriched in spliceosomal snRNPs. Also found in the cytoplasm

### Gemin 2 Polyclonal 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](#)

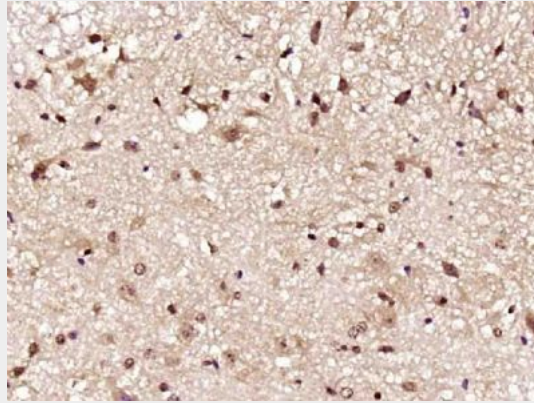
### Gemin 2 Polyclonal Antibody - Images



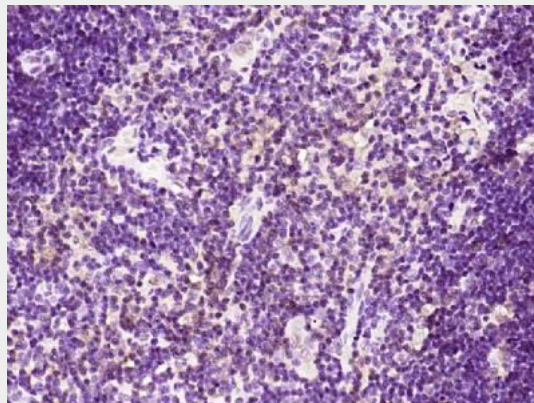
#### Sample:

HepG2(Human) Cell Lysate at 30 ug  
MCF-7(Human) Cell Lysate at 30 ug  
Primary: Anti-Gemin 2 (bs-11562R) at 1/1000 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 32 kD

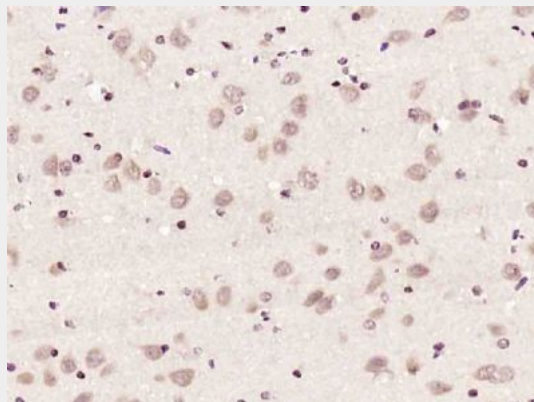
Observed band size: 32 kD



Paraformaldehyde-fixed, paraffin embedded (rat spinal cord); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Gemin 2) Polyclonal Antibody, Unconjugated (bs-11562R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat thymus); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Gemin 2) Polyclonal Antibody, Unconjugated (bs-11562R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Gemin

2) Polyclonal Antibody, Unconjugated (bs-11562R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.