

Sip1 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI11716

Product Information

Application WB

Primary Accession <u>Q9CQQ4</u>

Other Accession <u>NM 025656</u>, <u>NP 079932</u>

Reactivity Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Horse, Bovine

Predicted Mouse, Chicken

Host Rabbit
Clonality Polyclonal
Calculated MW 30441

Additional Information

Gene ID 66603

Alias Symbol 1700012N19Rik, Gemin2, Sip1

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 Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-Sip1 antibody concentration is 1 mg/ml

in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C.

Avoid repeat freeze-thaw cycles.

Precautions Sip1 antibody - N-terminal region is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name Gemin2 {ECO:0000312 | MGI:MGI:1913853}

Synonyms Sip1

Function The SMN complex catalyzes the assembly of small nuclear

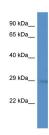
ribonucleoproteins (snRNPs), the building blocks of the spliceosome, and thereby plays an important role in the splicing of cellular pre- mRNAs (By similarity). Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP (Sm core) (By similarity). 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 (By similarity). To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A (By similarity). 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 (By similarity). 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 (By similarity).

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 (By similarity).

Images



WB Suggested Anti-Sip1 Antibody Titration: 1.0 µg/ml Positive Control: Mouse Brain

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