

A9707

Leader in Biomolecular Solutions for Life Science



SMN1 Rabbit mAb

Catalog No.: A9707

Recombinant

Basic Information

Observed MW

38kDa

Calculated MW

32kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

WB,IHC-P,ELISA

Cross-Reactivity

Human,Rat

CloneNo number

ARC1710

Recommended Dilutions

WB 1:500 - 1:1000

IHC-P 1:50 - 1:200

Background

This gene is part of a 500 kb inverted duplication on chromosome 5q13. This duplicated region contains at least four genes and repetitive elements which make it prone to rearrangements and deletions. The repetitiveness and complexity of the sequence have also caused difficulty in determining the organization of this genomic region. The telomeric and centromeric copies of this gene are nearly identical and encode the same protein. However, mutations in this gene, the telomeric copy, are associated with spinal muscular atrophy; mutations in the centromeric copy do not lead to disease. The centromeric copy may be a modifier of disease caused by mutation in the telomeric copy. The critical sequence difference between the two genes is a single nucleotide in exon 7, which is thought to be an exon splice enhancer. Note that the nine exons of both the telomeric and centromeric copies are designated historically as exon 1, 2a, 2b, and 3-8. It is thought that gene conversion events may involve the two genes, leading to varying copy numbers of each gene. The protein encoded by this gene localizes to both the cytoplasm and the nucleus. Within the nucleus, the protein localizes to subnuclear bodies called gems which are found near coiled bodies containing high concentrations of small ribonucleoproteins (snRNPs). This protein forms heteromeric complexes with proteins such as SIP1 and GEMIN4, and also interacts with several proteins known to be involved in the biogenesis of snRNPs, such as hnRNP U protein and the small nucleolar RNA binding protein. Multiple transcript variants encoding distinct isoforms have been described.

Immunogen Information

Gene ID

6606

Swiss Prot

Q16637

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 103-200 of human SMN1 (Q16637).

Synonyms

SMA; SMN; SMA1; SMA2; SMA3; SMA4; SMA@; SMNT; BCD541; GEMIN1; TDRD16A; T-BCD541; SMN1

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

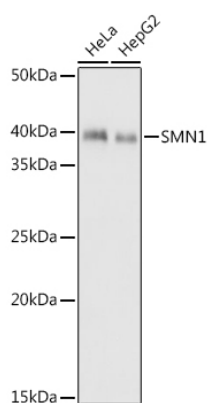
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

Validation Data



Western blot analysis of various lysates using SMN1 Rabbit mAb (A9707) at 1:1000 dilution.

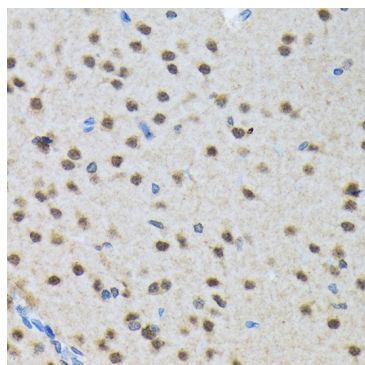
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

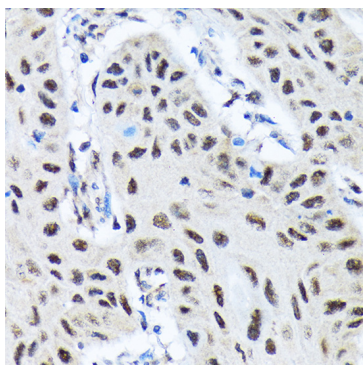
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1s.



Immunohistochemistry analysis of paraffin-embedded Rat brain using SMN1 Rabbit mAb (A9707) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using SMN1 Rabbit mAb (A9707) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.