

Datasheet for ABIN7270651  
**anti-SMN1 antibody**



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3 Images

### Overview

Quantity:	100 µL
Target:	SMN1
Reactivity:	Human
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This SMN1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

### Product Details

Purpose:	SMN1 Rabbit mAb
Immunogen:	A synthesized peptide derived from human SMN1
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Characteristics:	Monoclonal Antibodies
Purification:	Affinity purification

### Target Details

Target:	SMN1
Alternative Name:	SMN1 ( <a href="#">SMN1 Products</a> )
Background:	This gene is part of a 500 kb inverted duplication on chromosome 5q13. The repetitiveness and

## Target Details

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

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Molecular Weight: 36kDa

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Gene ID: 6606

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UniProt: [Q16637](#)

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Pathways: [Ribonucleoprotein Complex Subunit Organization](#)

## Application Details

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Application Notes: WB,1:500 - 1:2000,IHC,1:50 - 1:200

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Buffer: PBS with 0.02 % sodium azide,0.05 % BSA,50 % glycerol, pH 7.3.

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Preservative: Sodium azide

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Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

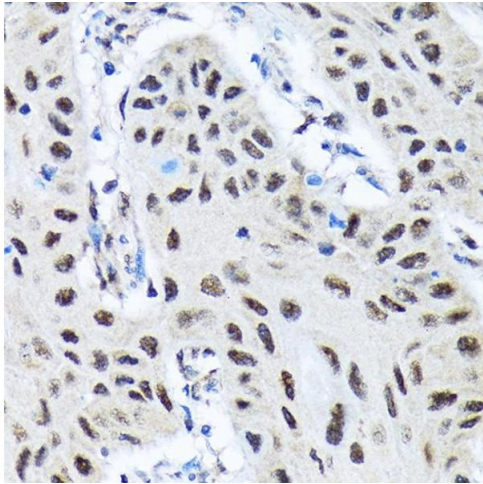
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Storage: -20 °C

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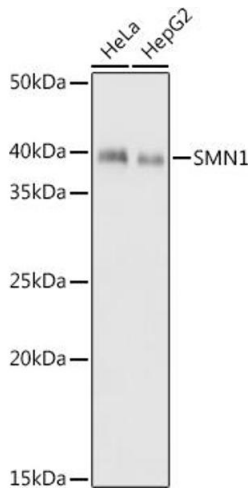
Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.

Images



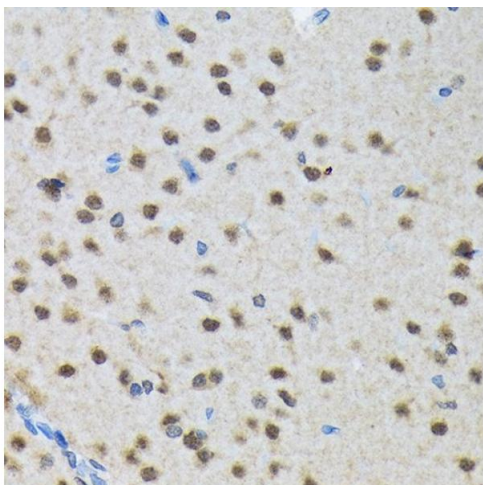
Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded human lung cancer using SMN1 Rabbit mAb (ABIN7270651) 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.



Western Blotting

**Image 2.** Western blot analysis of extracts of various cell lines, using SMN1 antibody (ABIN7270651) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.



Immunohistochemistry

**Image 3.** Immunohistochemistry of paraffin-embedded rat brain using SMN1 Rabbit mAb (ABIN7270651) 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.