

Datasheet for ABIN6568829

**anti-SMN1 antibody**

3 Images

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## Overview

Quantity:	200 µL
Target:	SMN1
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMN1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

## Product Details

Immunogen:	Recombinant protein of human SMN2
Isotype:	IgG
Purification:	Affinity purification

## Target Details

Target:	SMN1
Alternative Name:	SMN1 ( <a href="#">SMN1 Products</a> )
Background:	Synonyms: BCD541,Component of gems 1,Gemin 1,Gemin-1,OTTHUMP00000125198,OTTHUMP00000223567,OTTHUMP00000223568,OTTHUMP00000224066,OTTHUMP00000224067,1,SMA 2,SMA 3,SMA 4,SMA,SMA@,SMA1,SMA2,SMA3,SMA4,SMN,SMN,SMN1,SMN2,SMNT,Survival motor neuron protein of motor neuron 1,telomeric,T-BCD541

## Target Details

Background: This gene is part of a 500 kb inverted duplication on chromosome 5q13. This duplicated region contains at least two 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. While mutations in the telomeric copy are associated with spinal muscular atrophy, mutations in this gene, the centromeric copy, do not lead to disease. This gene 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 2 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 full length 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 SIF1, 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. Four transcript variants encoding distinct isoforms have been described.

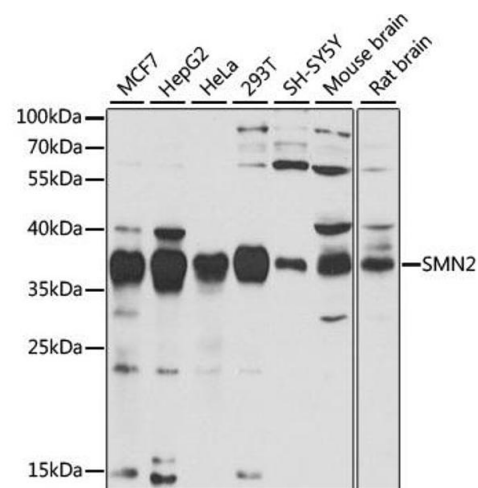
Molecular Weight:	Observed_MW: 35kDa Calculated_MW: 27kDa/28kDa/30kDa/31kDa
Gene ID:	6606
UniProt:	<a href="#">Q16637</a>
Pathways:	<a href="#">Ribonucleoprotein Complex Subunit Organization</a>

## Application Details

Application Notes:	WB 1:500 - 1:2000 IHC 1:50 - 1:200
Restrictions:	For Research Use only

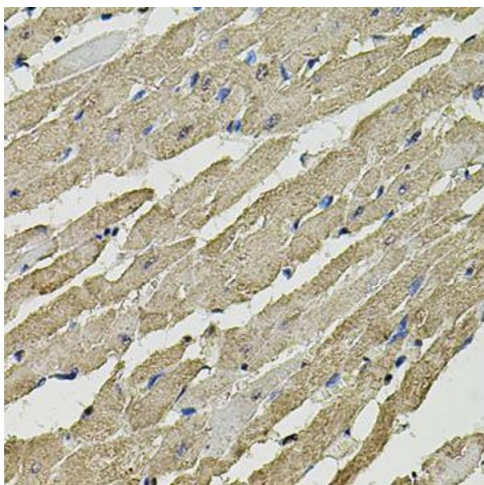
## Handling

Concentration:	1 mg/mL
Buffer:	Buffer: PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.



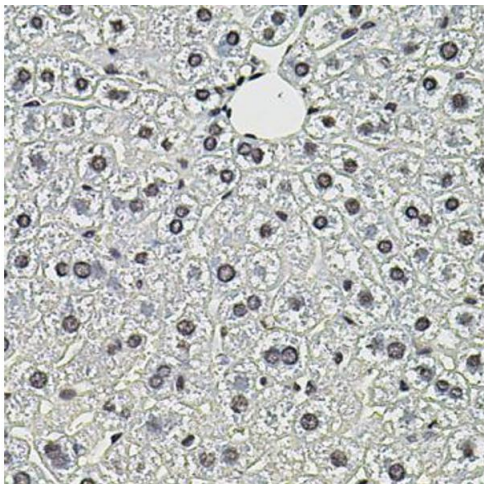
### Western Blotting

**Image 1.** Western blot analysis of extracts of various cell lines, using SMN2 antibody.



### Immunohistochemistry

**Image 2.** Immunohistochemistry of paraffin-embedded rat heart using SMN2 antibody.



### Immunohistochemistry

**Image 3.** Immunohistochemistry of paraffin-embedded mouse liver using SMN2 antibody.