

Datasheet for ABIN7256164

**anti-SMN2 antibody**

## 3 Images

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## Overview

Quantity:	200 µL
Target:	SMN2
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMN2 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), Immunofluorescence (IF)

## Product Details

Immunogen:	Recombinant fusion protein of human SMN2 (NP_059107.1).
Isotype:	IgG
Characteristics:	Polyclonal Antibody
Purification:	Affinity purification

## Target Details

Target:	SMN2
Alternative Name:	SMN2 ( <a href="#">SMN2 Products</a> )
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

## Target Details

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 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 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 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. Four transcript variants encoding distinct isoforms have been described.

Gene ID: 6607

UniProt: [Q16637](#)

Pathways: [Ribonucleoprotein Complex Subunit Organization](#)

## Application Details

Application Notes: IHC 1:50-1:200 IF 1:50-1:200

Restrictions: For Research Use only

## Handling

Format: Liquid

Concentration: 1 mg/mL

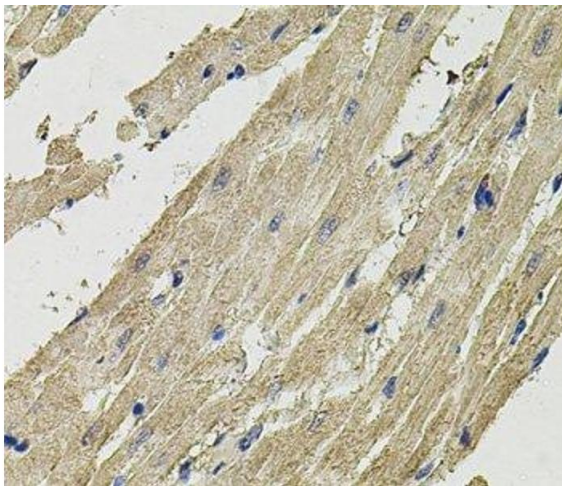
Buffer: PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3

Preservative: Sodium azide

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

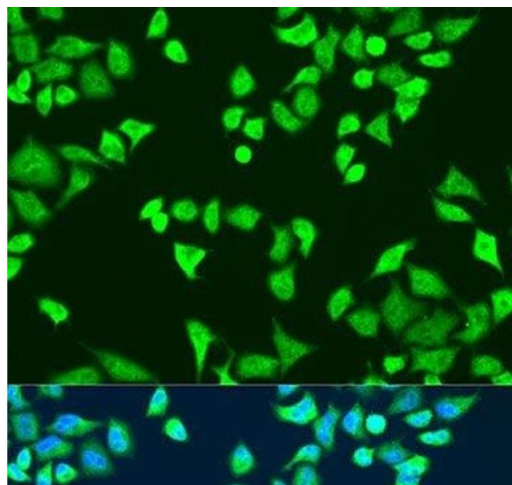
Storage: -20 °C

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



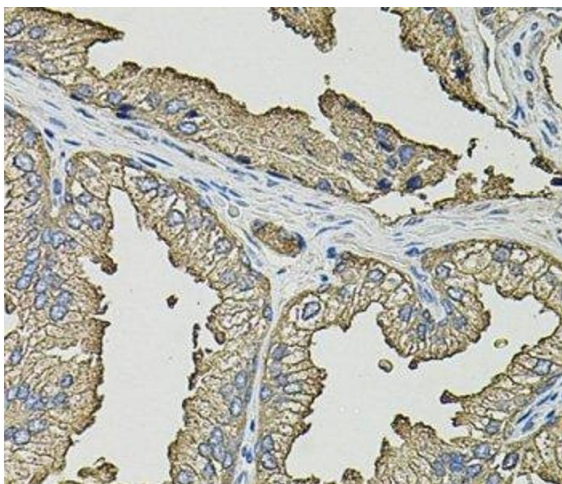
#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 1.** Immunohistochemistry of paraffin-embedded Rat heart using SMN2 Polyclonal Antibody



#### Immunofluorescence

**Image 2.** Immunofluorescence analysis of U2OS cells using SMN2 Polyclonal Antibody at dilution of 1:100. Blue: DAPI for nuclear staining.



#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Immunohistochemistry of paraffin-embedded Human prostate using SMN2 Polyclonal Antibody