OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA345684

SMN1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-SMN1 antibody: synthetic peptide directed towards the N terminal of human SMN1. Synthetic peptide located within the following region: KAVASFKHALKNGDICETSGKPKTTPKRKPAKKNKSQKKNTAASLQQWKV
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. *Note that this product is shipped as lyophilized powder to China customers.*
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	28 kDa
Gene Name:	survival of motor neuron 1, telomeric
Database Link:	NP_075012 Entrez Gene 20595 MouseEntrez Gene 6606 Human Q16637

View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

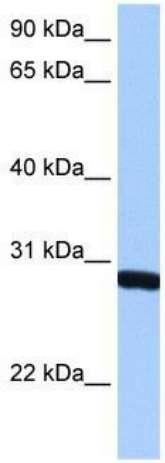
Background: SMN1 localizes to both the cytoplasm and the nucleus. Within the nucleus, the protein localizes to subnuclear bodies called gems which are found near coiled bodies containing high concentrations of small ribonucleoproteins (snRNPs). This protein forms heteromeric complexes with proteins such 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.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. 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. Two transcript variants are produced by this gene.

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

Note: Immunogen Sequence Homology: Dog: 100%; Human: 100%; Mouse: 100%; Pig: 93%; Horse: 93%; Rat: 92%; Rabbit: 85%; Guinea pig: 85%

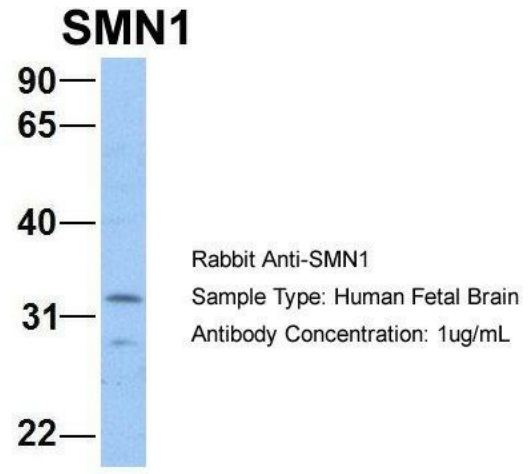
Protein Families: Druggable Genome, Stem cell - Pluripotency

Product images:

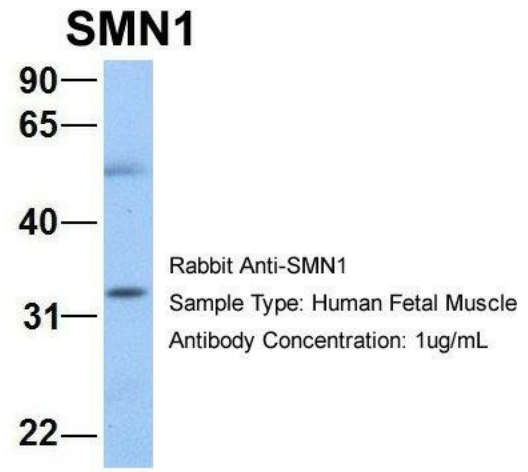


WB Suggested Anti-SMN1 Antibody; Titration: 0.2-1 ug/ml; Positive Control: HepG2

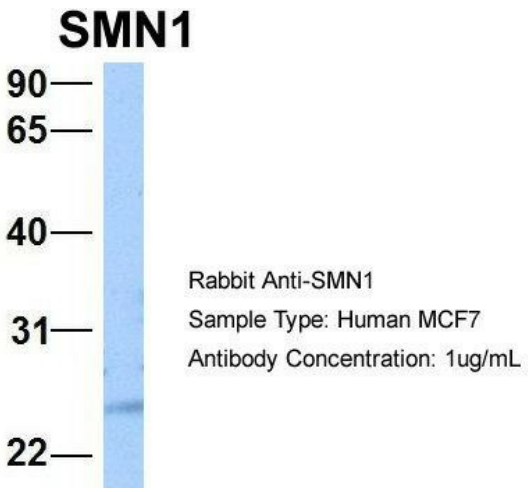
This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US



Host: Rabbit; Target Name: NOP56; Sample Tissue: Human Fetal Brain; Antibody Dilution: 1.0 ug/ml



Host: Rabbit; Target Name: NOP56; Sample Tissue: Human Fetal Muscle; Antibody Dilution: 1.0 ug/ml



Host: Rabbit; Target Name: NOP56; Sample Tissue: MCF7; Antibody Dilution: 1.0 ug/ml; SMN1 is supported by BioGPS gene expression data to be expressed in MCF7

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US