Datasheet for ABIN2778671

anti-SMN1 antibody (N-Term)

5 Images

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Overview

Quantity:	100 µL
Target:	SMN1
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat, Dog, Pig, Rabbit, Guinea Pig, Horse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMN1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human SMN1
Sequence:	KAVASFKHAL KNGDICETSG KPKTTPKRKP AKKNKSQKKN TAASLQQWKV
Predicted Reactivity:	Dog: 100%, Guinea Pig: 85%, Horse: 93%, Human: 100%, Mouse: 100%, Pig: 93%, Rabbit: 85%, Rat: 92%
Characteristics:	This is a rabbit polyclonal antibody against SMN1. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	SMN1

Target Details

Alternative Name:	SMN1 (SMN1 Products)
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. Alias Symbols: BCD541, SMA, SMA1, SMA2, SMA3, SMA4, SMA@, SMN, SMNT, T-BCD541, SMN2 Protein Interaction Partner: COPA, RNF2, BMI1, KDM1A, SMN1, RN7SL1, UBC, HDAC11, MIB1, GEMIN4, DICER1, DDX20, PAN2, RBFOX2, HNRNPUL1, IQCB1, UBL4A, SMN2, NOS2, vpr, GEMIN2, SRP68, SRP54, SRP19, SRP9, RNU2-1, RNU1-1, GEMIN5, MDC1, RBM25, COIL, SRSF5, HSPB1, CUL3, DDAH2, MAST2, SMC5, R Protein Size: 262
Molecular Weight:	28 kDa
Gene ID:	6606
NCBI Accession:	NM_022874, NP_075012
UniProt:	Q16637

Target Details

Pathways:	Ribonucleoprotein Complex Subunit Organization

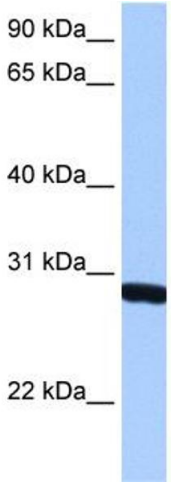
Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 262 AA
Restrictions:	For Research Use only

Handling

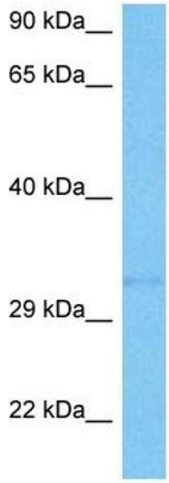
Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Images



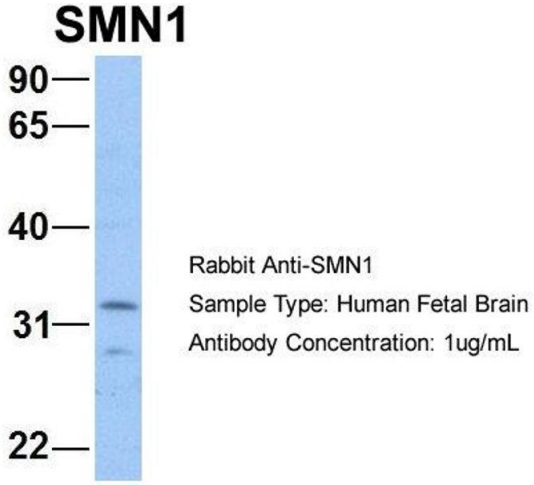
Western Blotting

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



Western Blotting

Image 2. Host: Mouse Target Name: SMN1 Sample Tissue: Mouse Kidney Antibody Dilution: 1ug/ml



Western Blotting

Image 3. Host: Rabbit Target Name: NOP56 Sample Type: Human Fetal Brain Antibody Dilution: 1.0ug/ml

Please check the product details page for more images. Overall 5 images are available for ABIN2778671.