Datasheet for ABIN2789459

anti-SMN2 antibody (N-Term)

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1 Image

Overview

Quantity:	100 µL
Target:	SMN2
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Pig, Rabbit, Dog, Goat, Horse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMN2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N-terminal region of SMN2
Sequence:	KHALKNGDIC ETSGKPKTTP KRKPAKKNKS QKKNTAASLQ QWKVGDKCSA
Predicted Reactivity:	Dog: 93%, Goat: 82%, Horse: 92%, Human: 100%, Mouse: 79%, Pig: 86%, Rabbit: 85%
Characteristics:	This is a rabbit polyclonal antibody against SMN2. It was validated on Western Blot.
Purification:	Affinity Purified

Target Details

Target:	SMN2
Alternative Name:	SMN2 (SMN2 Products)
Background:	This gene is part of a 500 kb inverted duplication on chromosome 5q13. This duplicated region

Target Details

	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. 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. Alias Symbols: BCD541, C-BCD541, FLJ76644, MGC20996, MGC5208, SMN1, SMNC Protein Interaction Partner: FAM9B, VPS28, BLOC1S6, CHTOP, HNRNPUL1, POLR1C, PPIG, SMN2, BYSL, WWOX, vpr, UBC, SMN1, RBM25, DDX20, COIL, SRSF5, CUL3, POLR2A, GAR1, SNRPG, SNRPF, SNRPB2, TIAL1, DHX9, GEMIN2, SNRPD1, SNRPD3, SNRPD2, SNRPB, FBL, SNRPE, LRIF1, OSTF1, COPS6, LENG8, STXBP3 Protein Size: 250
Molecular Weight:	27 kDa
Gene ID:	6607
NCBI Accession:	NM_022877, NP_075015
UniProt:	Q16637
Pathways:	Ribonucleoprotein Complex Subunit Organization

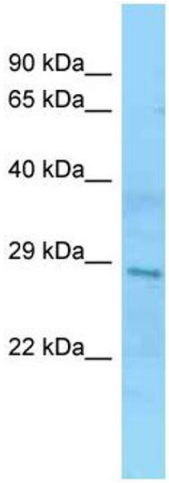
Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 250 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-SMN2 Antibody Titration: 1.0 ug/ml Positive Control: Jurkat Whole Cell SMN2 is supported by BioGPS gene expression data to be expressed in Jurkat