SMN2 Rabbit Polyclonal Antibody

CAB12519

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

35kDa

Calculated MW:

27kDa/28kDa/30kDa/31kDa

Applications:

WB IHC IF

Reactivity:

Human, Mouse, Rat

Antibody Information

Recommended dilutions:
WB 1:500 - 1:2000 IHC 1:50 - 1:200 IF 1:50 - 1:200

Source:
Rabbit

Isotype:
IgG

Purification:
Affinity purification

Protein 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 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.

Immunogen information

Gene ID:
6607

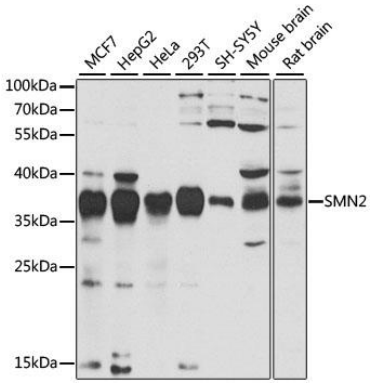
Uniprot
Q16637

Synonyms:
SMN2; BCD541; C-BCD541; GEMIN1; SMNC; TDRD16B

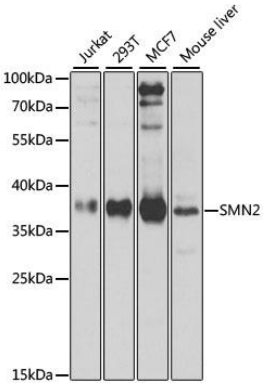
Immunogen:
Recombinant fusion protein containing a sequence corresponding to amino acids 1-197 of human SMN2 (NP_059107.1).

Storage:
Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Product Images



Western blot analysis of extracts of various cell lines, using SMN2 antibody (CAB12519) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 30s.



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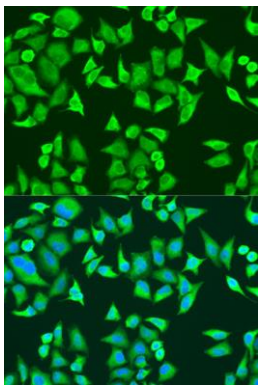
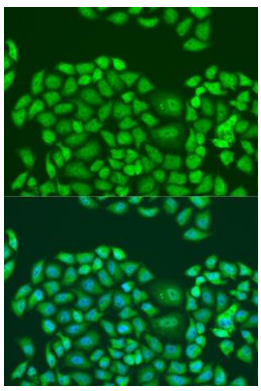


Immunofluorescence analysis of U2OS cells using SMN2 antibody (CAB12519) at dilution of 1:100. Blue: DAPI for nuclear staining.



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