

## anti- SMN antibody

### Product Information

Catalog No.:	CAF50333
Size:	100µg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	≥95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
Clone ID:	None
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months (Avoid repeated freeze / thaw cycles.)

### 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

Immunogen:	survival of motor neuron 2, centromeric
Synonyms:	C BCD541, Component of gems 1, FLJ76644, Gemin 1, SMN, SMN1, SMN1, SMN, SMN2, SMNC, SMNT, Survival motor neuron protein
Observed MW:	38 kDa
Uniprot ID :	Q16637

**This Antibody is for Research Use Only. Not for Diagnostic Procedures.**

This is a sample Antibody manual only. Always refer to the hard copy manual included in the Antibody for your experiment.

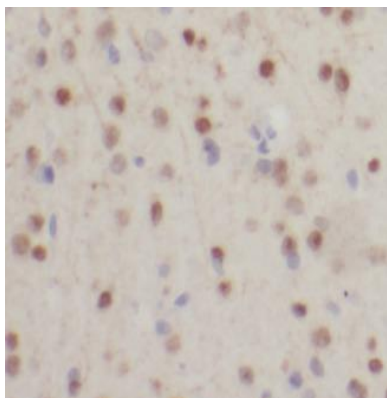
## Application

Reactivity: Human, Mouse, Rat

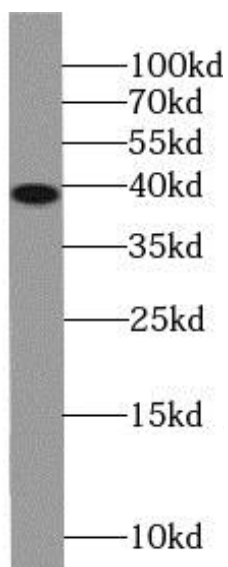
Tested Application: ELISA, WB, IHC

Recommended dilution: WB: 1:500 - 1:2000; IHC: 1:50 - 1:200

Image:



Immunohistochemistry of paraffin-embedded human brain using CAF50333(SMN2 antibody) at dilution of 1:100



HEK-293 cells were subjected to SDS PAGE followed by western blot with CAF50333(SMN2 antibody) at dilution of 1:1000

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