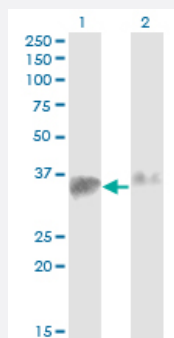


# SMN2 monoclonal antibody (M02), clone 1A3-2B9

Catalog # H00006607-M02

Size 100 ug

## Applications

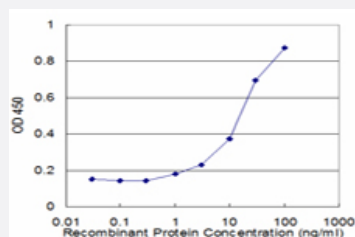


### Western Blot (Transfected lysate)

Western Blot analysis of SMN2 expression in transfected 293T cell line by SMN2 monoclonal antibody (M02), clone 1A3-2B9.

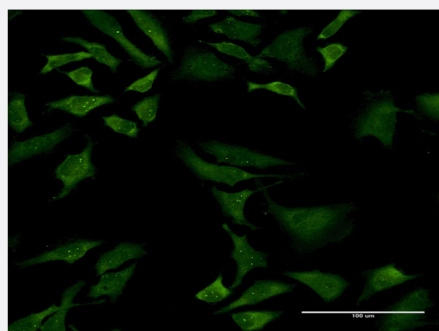
Lane 1: SMN2 transfected lysate (Predicted MW: 31.8 kDa).

Lane 2: Non-transfected lysate.



### Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged SMN2 is approximately 1ng/ml as a capture antibody.



### Immunofluorescence

Immunofluorescence of monoclonal antibody to SMN2 on HeLa cell . [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (56.76 KDa) .

## Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against a full-length recombinant SMN2.
<b>Immunogen</b>	SMN2 (AAH00908, 1 a.a. ~ 282 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Sequence</b>	MAMSSGGSGGGVPEQEDSVLFRRGTGQSDSDWDDTALIKAYDKAVASFKHALKNGDICETSG KPKTTPKRKPAKKNKSQKKNTAASLQQWKVGDKCSAMWSEDGCMPTIASIDFKRETCVVVYTG YGNREEQNLSDLLSPICEVANNIEQNAQENENESQVSTDESENSRSPGNKSDNIKPKSAPWNSFL PPPPMPGPRLGPGKPLKFNGPPPPPPPPHLLSCWLPPFPSPGPIIPPPPICPDSLDDAD ALGSMLISWYMSGYHTGYMEMLA
<b>Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Isotype</b>	IgG2a Kappa
<b>Quality Control Testing</b>	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (56.76 KDa) .
<b>Storage Buffer</b>	In 1x PBS, pH 7.4
<b>Storage Instruction</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## Applications

### ● Western Blot (Transfected lysate)

Western Blot analysis of SMN2 expression in transfected 293T cell line by SMN2 monoclonal antibody (M02), clone 1A3-2B9.

Lane 1: SMN2 transfected lysate (Predicted MW: 31.8 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

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Detection limit for recombinant GST tagged SMN2 is approximately 1ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to SMN2 on HeLa cell . [antibody concentration 10 ug/ml]

## Gene Info — SMN2

**Entrez GeneID** [6607](#)

**GeneBank Accession#** [BC000908](#)

**Protein Accession#** [AAH00908](#)

**Gene Name** SMN2

**Gene Alias** BCD541, C-BCD541, FLJ76644, MGC20996, MGC5208, SMNC

**Gene Description** survival of motor neuron 2, centromeric

**Omim ID** [601627](#)

**Gene Ontology** [Hyperlink](#)

## Gene Summary

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. [provided by RefSeq]

## Other Designations

OTTHUMP00000125236|OTTHUMP00000125237|gemin 1

## Disease

- [Amyotrophic lateral sclerosis](#)
- [Disease Progression](#)
- [Genetic Predisposition to Disease](#)
- [Muscular Atrophy](#)
- [Nerve Degeneration](#)
- [Spinal Muscular Atrophies of Childhood](#)
- [Spinal muscular atrophy](#)