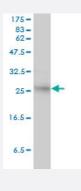
SMN2 monoclonal antibody (M01), clone 2B11-2A9

Catalog # H00006607-M01 Size 100 ug

Applications



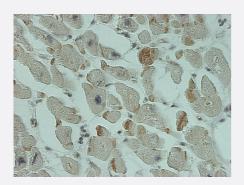
Western Blot (Tissue lysate)

SMN2 monoclonal antibody (M01), clone 2B11-2A9. Western Blot analysis of SMN2 expression in human colon.

250 - 150 - 100 - 75 -	
50 -	
37 -	
25-	
20-	
15-	
10-	

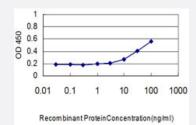
Western Blot (Cell lysate)

SMN2 monoclonal antibody (M01), clone 2B11-2A9 Western Blot analysis of SMN2 expression in IMR-32 (Cat # L008V1).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunoperoxidase of monoclonal antibody to SMN2 on formalin-fixed paraffinembedded human heart tissue. [antibody concentration 1 ~ 10 ug/ml]

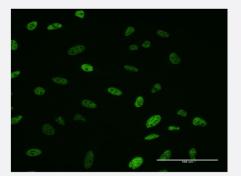


Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged SMN2 is approximately 0.3ng/ml as a capture antibody.

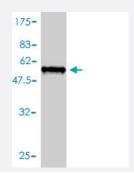


Product Information



Immunofluorescence

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



Western Blot detection against Immunogen (56.76 KDa).

Specification	
Product Description	Mouse monoclonal antibody raised against a full length recombinant SMN2.
Immunogen	SMN2 (AAH00908, 1 a.a. ~ 282 a.a) full-length recombinant protein with GST tag. MW of the GST ta g alone is 26 KDa.
Sequence	MAMSSGGSGGGVPEQEDSVLFRRGTGQSDDSDIWDDTALIKAYDKAVASFKHALKNGDICETSG KPKTTPKRKPAKKNKSQKKNTAASLQQWKVGDKCSAIWSEDGCIYPATIASIDFKRETCVVVYTG YGNREEQNLSDLLSPICEVANNIEQNAQENENESQVSTDESENSRSPGNKSDNIKPKSAPWNSFL PPPPPMPGPRLGPGKPGLKFNGPPPPPPPPPPHLLSCWLPPFPSGPPIIPPPPPICPDSLDDAD ALGSMLISWYMSGYHTGYYMEMLA
Host	Mouse
Reactivity	Human
lsotype	lgG2a kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (56.76 KDa).
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.



Applications

- Western Blot (Tissue lysate)
 SMN2 monoclonal antibody (M01), clone 2B11-2A9. Western Blot analysis of SMN2 expression in human colon.
 <u>Protocol Download</u>
- Western Blot (Cell lysate)

SMN2 monoclonal antibody (M01), clone 2B11-2A9 Western Blot analysis of SMN2 expression in IMR-32 (Cat # L008V1). <u>Protocol Download</u>

Western Blot (Recombinant protein)

Protocol Download

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to SMN2 on formalin-fixed paraffin-embedded human heart tissue. [antibody concentration 1 ~ 10 ug/ml]

Protocol Download

- Sandwich ELISA (Recombinant protein)
 Detection limit for recombinant GST tagged SMN2 is approximately 0.3ng/ml as a capture antibody.
 <u>Protocol Download</u>
- ELISA
- Immunofluorescence

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

Gene Info — SMN2	
Entrez GenelD	<u>6607</u>
GeneBank Accession#	BC000908
Protein Accession#	<u>AAH00908</u>
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 c ontains at least four genes and repetitive elements which make it prone to rearrangements and d eletions. The repetitiveness and complexity of the sequence have also caused difficulty in determi ning the organization of this genomic region. The telomeric and centromeric copies of this gene a re nearly identical and encode the same protein. While mutations in the telomeric copy are associ ated with spinal muscular atrophy, mutations in this gene, the centromeric copy, do not lead to dis ease. This gene may be a modifier of disease caused by mutation in the telomeric copy. The criti cal sequence difference between the two genes is a single nucleotide in exon 7, which is thought t o be an exon splice enhancer. Note that the nine exons of both the telomeric and centromeric copi es 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 e ncoded by this gene localizes to both the cytoplasm and the nucleus. Within the nucleus, the protei n 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 invo lved 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 Ref Seq **Other Designations** OTTHUMP00000125236|OTTHUMP00000125237|gemin 1

Product Information

Publication Reference

😭 Abnova

Survival motor neuron (SMN) protein in the spinal anterior horn cells of patients with sporadic amyotrophic lateral sclerosis.

Yingshan Piao, Tomoyo Hashimoto, Sachiko Takahama, Akiyoshi Kakita, Takashi Komori, Takashi Morita, Hitoshi Takahashi, Toshio Mizutani, Kiyomitsu Oyanagi.

Brain Research 2011 Feb; 1372:152.

Application: IP, Hamster, CHO cells

<u>The RNA binding protein hnRNP Q modulates the utilization of exon 7 in the survival motor neuron 2 (SMN2)</u> <u>gene.</u>

Hung-Hsi Chen, Jan-Growth Chang, Ruei-Min Lu, Tsui-Yi Peng, Woan-Yuh Tarn.

Molecular and Cellular Biology 2008 Nov; 28(22):6929.

Application: WB-Ti, Mouse, Mouse brain, Mouse liver, Mouse testes



Disease

- Amyotrophic lateral sclerosis
- Disease Progression
- Genetic Predisposition to Disease
- <u>Muscular Atrophy</u>
- <u>Nerve Degeneration</u>
- Spinal Muscular Atrophies of Childhood
- Spinal muscular atrophy