SMN1 monoclonal antibody, clone 2F1

Catalog # MAB10323 Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis using SMN1 monoclonal antobody, clone 2F1 (Cat # MAB10323) against HepG2 (1), HeLa (2), K-562 (3), Jurkat (4), SK-BR-3 (5), A-431 (6) and COS-7 (7) cell lysate.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemical analysis of paraffin-embedded human testis tissue (A) and lung cancer tissue (B) using SMN1 monoclonal antobody, clone 2F1 (Cat # MAB10323) with DAB staining.



Flow Cytometry

Flow cytometric analysis of HepG2 cells using SMN1 monoclonal antobody, clone 2F1 (Cat # MAB10323) (green) and negative control (purple).





Product Information

Specification

| Product Description | Mouse monoclonal antibody raised against recombinant SMN1. |
|----------------------|---|
| Immunogen | Recombinant protein corresponding to human SMN1. |
| Host | Mouse |
| Theoretical MW (kDa) | 39 |
| Reactivity | Human |
| Form | Liquid |
| lsotype | lgG1 |
| Recommend Usage | ELISA (1:10000) Western Blot (1:500-1:2000) Immunohistochemistry (1:200-1:1000) Flow cytometry (1:200-1:400) The optimal working dilution should be determined by the end user. |
| Storage Buffer | In ascites (0.03% sodium azide) |
| Storage Instruction | Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing. |
| Note | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

Applications

Western Blot (Cell lysate)

Western blot analysis using SMN1 monoclonal antobody, clone 2F1 (Cat # MAB10323) against HepG2 (1), HeLa (2), K-562 (3), Jurkat (4), SK-BR-3 (5), A-431 (6) and COS-7 (7) cell lysate.

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

Immunohistochemical analysis of paraffin-embedded human testis tissue (A) and lung cancer tissue (B) using SMN1 monoclonal antobody, clone 2F1 (Cat # MAB10323) with DAB staining.

Enzyme-linked Immunoabsorbent Assay

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Product Information

• Flow Cytometry

Flow cytometric analysis of HepG2 cells using SMN1 monoclonal antobody, clone 2F1 (Cat # MAB10323) (green) and negative control (purple).

| Gene Info — SMN1 | |
|--------------------|--|
| Entrez GenelD | 6606 |
| Gene Name | SMN1 |
| Gene Alias | BCD541, SMA, SMA1, SMA2, SMA3, SMA4, SMA@, SMN, SMNT, T-BCD541 |
| Gene Description | survival of motor neuron 1, telomeric |
| Omim ID | <u>253300 253400 253550 271150 600354</u> |
| 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. However, mutations in this gene, the telomeric c opy, are associated with spinal muscular atrophy; mutations in the centromeric copy do not lead t o disease. The centromeric copy 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 c onversion events may involve the two genes, leading to varying copy numbers of each gene. The protein encoded by this gene localizes to both the cytoplasm and the nucleus. Within the nucleus, t he protein localizes to subnuclear bodies called gems which are found near coiled bodies contain ing high concentrations of small ribonucleoproteins (snRNPs). This protein forms heteromeric co mplexes with proteins such as SIP1 and GEMIN4, and also interacts with several proteins known t o be involved in the biogenesis of snRNPs, such as hnRNP U protein and the small nucleolar RNA binding protein. Two transcript variants encoding distinct isoforms have been described. [provide d by RefSeq |
| Other Designations | OTTHUMP00000125198 gemin 1 |

Disease

- <u>Acute Disease</u>
- <u>Amyotrophic lateral sclerosis</u>
- <u>Chronic Disease</u>

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