SMN1 monoclonal antibody (2B1)

Survival Motor Neuron (SMN) is a ~38 kDa protein produced chiefly by the SMN1 gene, located on the telomeric portion of chromosome 5q. A nearly identical centromeric copy of the gene (SMN2) also produces a small amount of full-length SMN protein, but due to a translationally silent C(R)T transition that results in alternative splicing of the pre-mRNA, most of the resulting SMN is truncated, causing reduced protein stability and lower overall SMN levels. Deletion or mutation of the SMN1 gene results in a reduced level of full-length SMN protein and manifests as a range of neuromuscular phenotypes in humans as the disease spinal muscular atrophy (SMA). SMA is characterized by muscle weakness and atrophy, functional disability and is the most common lethal genetic disease of infants and toddlers. Approximately one in 35 adults is a carrier of the SMN1 mutation. The incidence of SMA is 1 in 6,000 to 1 in 10,000 live births. SMN protein is present in the cell cytoplasm, and also in the nucleus where it is concentrated in "gem" structures associated with Cajal bodies. SMN protein is a constituent of Gemin-containing complexes, and is thought to participate in many aspects of RNA metabolism. SMN complexes have been shown to mediate the assembly of uridine-rich small nuclear ribonucleoproteins (snRNPs), which in turn act as critical components of spliceosomes.

This antibody is covered by our Worry-Free Guarantee.

Citations: 1

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Ordering Information

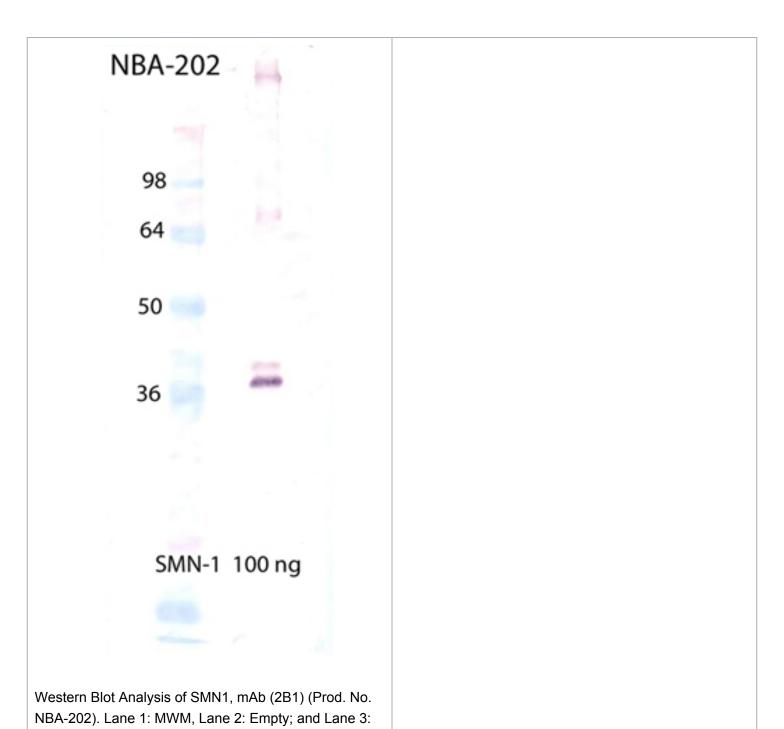
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ADI-NBA-202-200

200µg

Manuals, SDS & CofA

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SMN1 (human), (recombinant) (His-tag) (Prod. No.

NBP-201).

Handling & Storage

Handling Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name Survival Motor Neuron

Application WB

Application Notes Detects a band of ~38kDa by Western blot.

Clone 2B1

Formulation Liquid. In PBS, pH 7.2, containing 0.09% sodium azide.

Host Mouse

Immunogen Recombinant fragment corresponding to the carboxy-terminus of human SMN1.

Isotype IgG

Purity Detail Protein G-affinity purified.

Recommendation
Dilutions/Conditions

Western Blot (1:1,000, colorimetric)Suggested dilutions/conditions may not be available

for all applications. Optimal conditions must be determined individually for each

application.

Source Purified from hybridoma tissue culture supernatant.

Species Reactivity Human

UniProt ID Q16637



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