Survival of motor neuron 1, telomeric (SMN1) / Gemin 1 Antibody

Mouse Monoclonal Antibody [Clone SMN1/1596]

Catalog No	Format	Size
6606-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
6606-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
6606-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

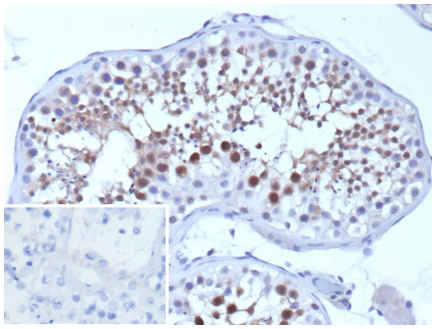
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

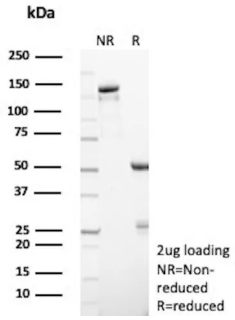
Clone	SMN1/1596
Gene Name	SMN1
Immunogen	Recombinant full-length human SMN1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	39kDa
Cellular Localization	Nucleus
Species Reactivity	Human

**Optimal dilution for a specific application should be determined.*

Product Images for Survival of motor neuron 1, telomeric (SMN1) / Gemin 1 Antibody



Formalin-fixed, paraffin-embedded human testis stained with Gemin-1 Mouse Monoclonal Antibody (SMN1/1596). Inset: PBS instead of primary antibody; secondary only negative control.



SDS-PAGE Analysis Purified GEMIN1 Mouse Monoclonal Antibody (SMN1/1596). Confirmation of Purity and Integrity of Antibody.

Specificity & Comments

Spinal muscular atrophy (SMA) is an autosomal recessive neurodegenerative disease characterized by loss of motor neurons in the spinal cord. SMA is caused by deletion or loss-of-function mutations of SMN (survival of motor neuron) gene. SMN, also known as Gemin1, SMN1, SMNT and BCD541, exists as four isoforms produced by alternative splicing. SMN is oligomeric and forms a complex with Gemin2 (formerly SIP1), Gemin3 (a DEAD box RNA helicase), Gemin4, Gemin5 and Gemin6, as well as several spliceosomal snRNP proteins. The SMN complex plays an essential role in splicesomal snRNP assembly in the cytoplasm and is required for pre-mRNA splicing of the nucleus. The SMN complex is found in both the cytoplasm and the nucleus. The nuclear form is concentrated in subnuclear bodies called gems (gemini of the coiled bodies). Cytoplasmic SMN interacts with spliceosomal Sm proteins and facilitates their assembly onto U snRNAs, and nuclear SMN mediates recycling of pre-mRNA splicing factors. Nearly identical telomeric and centromeric forms of SMN encode the same protein; however, only mutations in the telomeric form are associated with the disease-state SMA. SMN is expresed in a wide variety of tissues including brain, kidney, liver, spinal cord and moderately in skeletal and cardiac muscle.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Neuroscience, Signal Transduction

Limitations and Warranty