

# Gemin6 (C-20): sc-21443

## BACKGROUND

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 in the SMN (survival of motor neuron) gene. Gemin6, the protein product of human chromosome 2p22.1, associates directly with SMN and is a part of the SMN complex containing Gemin2, Gemin3, Gemin4 and Gemin5 as well as several spliceosomal snRNP proteins. The SMN complex plays an essential role in spliceosomal 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 (for Gemini of the coiled bodies).

## REFERENCES

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- Pellizzoni, L., Baccon, J., Rappsilber, J., Mann, M. and Dreyfuss, G. 2002. Purification of native survival of motor neuron complexes and identification of Gemin6 as a novel component. *J. Biol. Chem.* 277: 7540-7545.
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## CHROMOSOMAL LOCATION

Genetic locus: GEMIN6 (human) mapping to 2p22.1; Gemin6 (mouse) mapping to 17 E3.

## SOURCE

Gemin6 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Gemin6 of human origin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-21443 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Gemin6 (C-20) is recommended for detection of Gemin6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Gemin6 (C-20) is also recommended for detection of Gemin6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Gemin6 siRNA (h): sc-42132, Gemin6 siRNA (m): sc-42133, Gemin6 shRNA Plasmid (h): sc-42132-SH, Gemin6 shRNA Plasmid (m): sc-42133-SH, Gemin6 shRNA (h) Lentiviral Particles: sc-42132-V and Gemin6 shRNA (m) Lentiviral Particles: sc-42133-V.

Molecular Weight of Gemin6: 19 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.