



Gemin8 (P-17): sc-66381

BACKGROUND

Gemin8 is a 242 amino acid protein encoded by the human gene GEMIN8. Gemin8, along with Gemin2-7 and unrip, is a major component of the large multiprotein survival of motor neurons (SMN) complex. The survival of motor neurons (SMN) protein, a product of the disease gene of the common neurodegenerative disease spinal muscular atrophy, is also part of the SMN complex. The SMN complex is a modular composition of proteins with SMN, Gemin8 and Gemin7 in its center. The SMN complex functions as an assembly machine for small nuclear ribonucleoproteins (snRNPs)—the major components of the spliceosome. Gemin8 binds directly to SMN and mediates its interaction with the Gemin6/Gemin7 heterodimer. Importantly, the loss of Gemin6, Gemin7 and Unrip interaction with SMN as a result of Gemin8 knockdown affects snRNP assembly by impairing the SMN complex association with Sm proteins but not with snRNAs. The Gemin6/Gemin7 complex binds to Sm proteins and might help organize Sm proteins for formation of Sm rings on snRNA targets.

REFERENCES

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RESEARCH USE

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

SOURCE

Gemin8 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Gemin8 of human origin.

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-66381 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Gemin8 (P-17) is recommended for detection of Gemin8 of 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).

Suitable for use as control antibody for Gemin8 siRNA (h): sc-62372.

Molecular Weight of Gemin8: 29 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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.