

Gemin7 (5F1): sc-130668

BACKGROUND

Gemin7 is a 131 amino acid protein encoded by the mouse gene Gemin7. Gemin7, along with Gemin6, is a significant component of the the large multiprotein human SMN complex. The SMN complex functions as an assembly machine for small nuclear ribonucleoproteins (snRNPs)-the major components of the spliceosome. 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. Although Gemin6 and Gemin7 have no significant sequence similarity with Sm proteins, both adopt canonical Sm folds. Moreover, Gemin6 and Gemin7 exist as a heterodimer, and interact with each other via an interface similar to that which mediates interactions among the Sm proteins. 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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CHROMOSOMAL LOCATION

Genetic locus: GEMIN7 (human) mapping to 19q13.32.

SOURCE

Gemin7 (5F1) is a mouse monoclonal antibody raised against recombinant Gemin7 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Gemin7 (5F1) is recommended for detection of Gemin7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Gemin7 siRNA (h): sc-62370, Gemin7 shRNA Plasmid (h): sc-62370-SH and Gemin7 shRNA (h) Lentiviral Particles: sc-62370-V.

Molecular Weight of Gemin7: 15 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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