SANTA CRUZ BIOTECHNOLOGY, INC.

SG2NA (N-20): sc-16853

BACKGROUND

Striatin, SG2NA, and zinedin, the three mammalian members of the striatin family, are multimodular, WD-repeat and calmodulin-binding proteins. Zinedin and SG2NA share with striatin identical protein-protein interaction domains and the same overall domain structure. All three proteins are both cytosolic and membrane-bound and bind calmodulin in the presence of calcium. Striatin is a neuronal, intracellular protein strictly expressed in the somatodendritic compartment, including spines, subsets of neurons, and is considered as a marker of neuronal polarity. Down-regulation of striatin, which is expressed in a few subsets of neurons, impairs the growth of dendrites as well as rat locomotor activity. Zinedin is mainly expressed in the central nervous system, whereas SG2NA is mainly expressed in the brain and muscle.

REFERENCES

1. Castets, F., et al. 1996. A novel calmodulin-binding protein, belonging to the WD-repeat family, is localized in dendrites of a subset of CNS neurons. J. Cell Biol. 134: 1051-1062.
2. Kachidian, P., et al. 1998. Relationships between striatin-containing neurons and cortical or thalamic afferent fibers in the rat striatum: an ultrastructural study by dual labeling. Neuroscience 85: 111-122.
3. Salin, P., et al. 1998. Distribution of striatin, a newly identified calmodulin-binding protein in the rat brain: an *in situ* hybridization and immunocytochemical study. J. Comp. Neurol. 397: 41-59.
4. Bartoli, M., et al. 1999. Down-regulation of striatin, a neuronal calmodulin- binding protein, impairs rat locomotor activity. J. Neurobiol. 40: 234-243.
5. Castets, F., et al. 2000. Zinedin, SG2NA, and striatin are calmodulin-binding, WD repeat proteins principally expressed in the brain. J. Biol. Chem. 275: 19970-19977.

CHROMOSOMAL LOCATION

Genetic locus: STRN3 (human) mapping to 14q12; Strn3 (mouse) mapping to 12 C1.

SOURCE

SG2NA (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SG2NA 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-16853 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SG2NA (N-20) is recommended for detection of SG2NA of mouse, rat and 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)], 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).

SG2NA (N-20) is also recommended for detection of SG2NA in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for SG2NA siRNA (h): sc-37647, SG2NA siRNA (m): sc-37648, SG2NA shRNA Plasmid (h): sc-37647-SH, SG2NA shRNA Plasmid (m): sc-37648-SH, SG2NA shRNA (h) Lentiviral Particles: sc-37647-V and SG2NA shRNA (m) Lentiviral Particles: sc-37648-V.

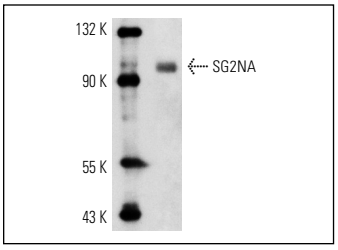
Molecular Weight of SG2NA: 94 kDa.

Positive Controls: mouse heart extract: sc-2254, Sol8 cell lysate: sc-2249 or A-10 cell lysate: sc-3806.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



SG2NA (N-20): sc-16853. Western blot analysis of SG2NA expression in mouse heart tissue extract.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **SG2NA (S68): sc-13562**, our highly recommended monoclonal alternative to SG2NA (N-20).