

Synaptogyrin-3 (H-70): sc-68936

BACKGROUND

The synaptogyrin family of proteins are integral membrane proteins containing four transmembrane regions. Synaptogyrins are tyrosine-phosphorylated proteins with two neuronal (Synaptogyrins-1 and -3) and one ubiquitous (Synaptogyrin-2) isoform. Synaptophysin and synaptogyrin represent the major constituents of synaptic vesicles. Synaptogyrin-1 is associated with presynaptic vesicles in neuronal cells. Synaptogyrin-2, also known as Cellugyrin, has a tyrosine phosphorylated C-terminal cytoplasmic tail and is involved in the regulation of membrane traffic in non-neuronal cells. Synaptogyrin-3 is expressed mainly in brain and placenta. The SYNGR4 gene encodes for the 234 amino acid protein Synaptogyrin-4.

REFERENCES

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- Belizaire, R., et al. 2004. Characterization of Synaptogyrin-3 as a new synaptic vesicle protein. *J. Comp. Neurol.* 470: 266-281.
- Hitchcock, I.S., et al. 2004. Essential components for a glutamatergic synapse between Merkel cell and nerve terminal in rats. *Neurosci. Lett.* 362: 196-199.
- Maslah, E., et al. 2004. Patterns of gene dysregulation in the frontal cortex of patients with HIV encephalitis. *J. Neuroimmunol.* 157: 163-175.
- Belfort, G.M., et al. 2005. Cellugyrin induces biogenesis of synaptic-like microvesicles in PC12 cells. *J. Biol. Chem.* 280: 7262-7272.
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CHROMOSOMAL LOCATION

Genetic locus: SYNGR3 (human) mapping to 16p13.3; Syngn3 (mouse) mapping to 17 A3.3.

SOURCE

Synaptogyrin-3 (H-70) is a rabbit polyclonal antibody raised against amino acids 160-229 mapping at the C-terminus of Synaptogyrin-3 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.

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.

APPLICATIONS

Synaptogyrin-3 (H-70) is recommended for detection of Synaptogyrin-3 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).

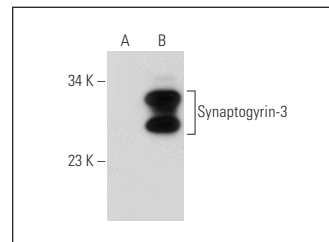
Synaptogyrin-3 (H-70) is also recommended for detection of Synaptogyrin-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Synaptogyrin-3 siRNA (h): sc-45555, Synaptogyrin-3 siRNA (m): sc-45556, Synaptogyrin-3 shRNA Plasmid (h): sc-45555-SH, Synaptogyrin-3 shRNA Plasmid (m): sc-45556-SH, Synaptogyrin-3 shRNA (h) Lentiviral Particles: sc-45555-V and Synaptogyrin-3 shRNA (m) Lentiviral Particles: sc-45556-V.

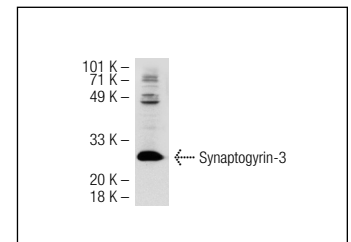
Molecular Weight of Synaptogyrin-3: 25 kDa.

Positive Controls: mouse brain extract: sc-2253, Synaptogyrin-3 (h): 293T Lysate: sc-176288 or Ramos cell lysate: sc-2216.

DATA



Synaptogyrin-3 (H-70): sc-68936. Western blot analysis of Synaptogyrin-3 expression in non-transfected: sc-117752 (A) and human Synaptogyrin-3 transfected: sc-176288 (B) 293T whole cell lysates.



Synaptogyrin-3 (H-70): sc-68936. Western blot analysis of Synaptogyrin-3 expression in mouse brain tissue extract.

RESEARCH USE

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



Try **Synaptogyrin-3 (E-11): sc-271046** or **Synaptogyrin-3 (G-3): sc-514081**, our highly recommended monoclonal alternatives to Synaptogyrin-3 (H-70).