

Synaptogyrin-3 (T-14): sc-34967

BACKGROUND

The Synaptogyrin family of proteins are integral membrane proteins containing four transmembrane regions. Synaptogyrins are tyrosine-phosphorylated proteins with two neuronal (Synaptogyrin-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

- Belfort, G.M., et al. 2003. Cellugyrin and Synaptogyrin facilitate targeting of synaptophysin to a ubiquitous synaptic vesicle-sized compartment in PC12 cells. *J. Biol. Chem.* 278: 47971-47978.
- 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.
- Witkovsky, P., et al. 2005. Rat retinal dopaminergic neurons: differential maturation of somatodendritic and axonal compartments. *J. Comp. Neurol.* 481: 352-362.

CHROMOSOMAL LOCATION

Genetic locus: SYNGR3 (human) mapping to 16p13.3; Syngr3 (mouse) mapping to 17 A3.3.

SOURCE

Synaptogyrin-3 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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.

Blocking peptide available for competition studies, sc-34967 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

Synaptogyrin-3 (T-14) 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).

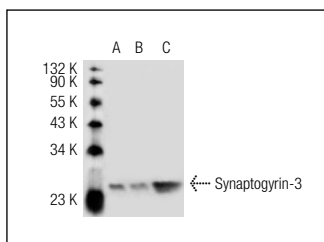
Synaptogyrin-3 (T-14) is also recommended for detection of Synaptogyrin-3 in additional species, including equine, canine, bovine and porcine.

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 or Ramos cell lysate: sc-2216.

DATA



Synaptogyrin-3 (T-14): sc-34967. Western blot analysis of Synaptogyrin-3 expression in non-transfected 293T: sc-117752 (A), mouse Synaptogyrin-3 transfected 293T: sc-123863 (B) and Ramos (C) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **Synaptogyrin-3 (E-11): sc-271046** or **Synaptogyrin-3 (G-3): sc-514081**, our highly recommended monoclonal alternatives to Synaptogyrin-3 (T-14).