

# Synaptogyrin-1 (C-14): sc-34956

## 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. The protein 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.

## CHROMOSOMAL LOCATION

Genetic locus: SYNGR1 (human) mapping to 22q13.1; Syng1 (mouse) mapping to 15 E1.

## SOURCE

Synaptogyrin-1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Synaptogyrin-1 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-34956 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-1 (C-14) is recommended for detection of Synaptogyrin-1 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-1 (C-14) is also recommended for detection of Synaptogyrin-1 in additional species, including canine and porcine.

Suitable for use as control antibody for Synaptogyrin-1 siRNA (h): sc-45551, Synaptogyrin-1 siRNA (m): sc-45552, Synaptogyrin-1 shRNA Plasmid (h): sc-45551-SH, Synaptogyrin-1 shRNA Plasmid (m): sc-45552-SH, Synaptogyrin-1 shRNA (h) Lentiviral Particles: sc-45551-V and Synaptogyrin-1 shRNA (m) Lentiviral Particles: sc-45552-V.

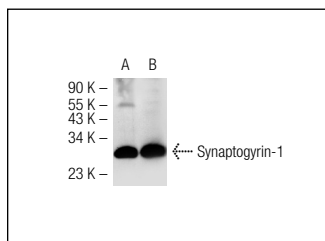
Molecular Weight of Synaptogyrin-1: 26 kDa.

Positive Controls: rat brain extract: sc-2392 or mouse brain extract: sc-2253.

## 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



Synaptogyrin-1 (C-14): sc-34956. Western blot analysis of Synaptogyrin-1 expression in mouse brain (A) and rat brain (B) tissue extracts.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Synaptogyrin-1 (A-6): sc-393456** or **Synaptogyrin-1 (F-4): sc-137224**, our highly recommended monoclonal alternatives to Synaptogyrin-1 (C-14).