**BACKGROUND**

The synaptogyrin family of proteins are integral membrane proteins containing four transmembrane regions. Synaptogyrins are tyrosine-phosphorylated proteins with two neuronal isoforms (Synaptogyrin-1 and -3) and one ubiquituous isoform (Synaptogyrin-2). 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 cellu-gyrin, 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. Synaptogyrin-4 is a 234 amino acid protein encoded by the SYNGR4 gene.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: SYNGR1 (human) mapping to 22q13.1; Syngr1 (mouse) mapping to 15 E1.

**SOURCE**

Synaptogyrin-1 (F-4) is a mouse monoclonal antibody raised against amino acids 159-234 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.

**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 (F-4) is recommended for detection of Synaptogyrin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blootto 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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**RESEARCH USE**

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

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**Synaptogyrin-1 (F-4): sc-137224. Western blot analysis of Synaptogyrin-1 expression in rat brain tissue extract.**