**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.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: SYNGR2 (human) mapping to 17q25.3; Syngr2 (mouse) mapping to 11 E2.

**SOURCE**

Synaptogyrin-2 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Synaptogyrin-2 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-34961 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.

**RESEARCH USE**

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

**APPLIED USE**

Synaptogyrin-2 (D-20) is recommended for detection of Synaptogyrin-2 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-2 (D-20) is also recommended for detection of Synaptogyrin-2 in additional species, including canine.

Suitable for use as control antibody for Synaptogyrin-2 siRNA (h): sc-45553 and Synaptogyrin-2 siRNA (m): sc-45554; and as shRNA Plasmid control antibody for Synaptogyrin-2 shRNA Plasmid (h): sc-45553-SH and Synaptogyrin-2 shRNA Plasmid (m): sc-45554-SH.

**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**

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

**PROTOCOLS**

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

**SYNAPTOGYRIN-2 (D-20): sc-34961. Western blot analysis of Synaptogyrin-2 expression in non-transfected 293T: sc-117752 (A), human Synaptogyrin-2 transfected 293T: sc-113714 (B) and Jurkat (C) whole cell lysates.**

**SYNAPTOGYRIN-2 (D-20): sc-34961. Western blot analysis of Synaptogyrin-2 expression in non-transfected 293T: sc-117752 (A), mouse Synaptogyrin-2 transfected 293T: sc-126066 (B) and Jurkat (C) whole cell lysates.**