Anti-Synaptojanin I

Catalog Number: 1936-SYNJ  Size: 100 μL  Isotype: IgG

Product Description: Purified mouse monoclonal antibody

Applications:  WB: 1:1000  IHC: 1:100

Antigen: Recombinant protein corresponding to amino acid residues from the C-terminal region of rat synaptojanin 1.

Species Reactivity: The antibody has been directly tested for reactivity in Western blots with rat tissue. Does not cross react with mouse.

Biological Significance: Synaptojanin is a phosphatidylinositol phosphatase involved in clathrin-mediated endocytosis of synaptic vesicles. Synaptojanin 1 has two alternatively spliced isoforms; one that is ~ 145 kDa and is exclusively expressed in neurons, and the other ~ 170 kDa which is expressed in non-neuronal, peripheral tissues (Ramjaun AR & McPherson PS, 1996). The gene which encodes Synaptojanin 1, SYNJ1, has been mapped to chromosome 21 thus making it a candidate for involvement in Down’s syndrome (DS). It has recently been demonstrated that Ts65Dn mice (the most commonly used model of DS) have altered phosphatidylinositol-4,5-bisphosphate metabolism. This defect is rescued by restoring SYNJ1 to disomy in the Ts65Dn mice (Voronov SV et al., 2008).

Western blot of rat hippocampal lysate showing specific immunolabeling of the ~145k synaptojanin I protein.

*WB* = Western Blot  *IF* = Immunofluorescence  *IHC* = Immunohistochemistry  *IP* = Immunoprecipitation

Packaging: 100 μl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 μg BSA per ml and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.

Storage and Stability: For long term storage –20°C is recommended. Stable at –20°C for at least 1 year

Shipment: Domestic - Ambient; International – Ambient.
Purification Method: Protein G purified culture supernatant

Antibody Specificity: Specific for the ~145k synaptojanin I protein in Western blots of rat brain extracts. Immunolabeling blocked by preadsorption of antibody with the protein used to generate the antibody.

Quality Control Tests: Western blots performed on each lot.

References:
