

Synaptojanin 2 (M-17): sc-12141

BACKGROUND

The inositol polyphosphate 5-phosphatases selectively remove the phosphate from the 5-position of various phosphatidylinositols, which generate second messengers in response to extracellular signals. Synaptojanins are characterized by an N-terminal SAC1-like sequence, a central 5-phosphate domain, and a unique C-terminal sequence and have been shown to use phosphatidylinositol 4,5-bisphosphate as a substrate. Synaptojanins exist as two isoforms, synaptojanin 1 and 2, which differ in the C-terminal domain, and each isoform has multiple variants produced by alternative splicing. Synaptojanin 1 is expressed as two major forms: the shorter is found in brain while the longer is expressed in peripheral tissues. Eight splice variants of synaptojanin 2 have been detected, including a brain specific isoform. Synaptojanins are thought to participate in the endocytosis of synaptic vesicles and the regulation of the actin cytoskeleton.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Synj2 (mouse) mapping to 17 A1.

SOURCE

Synaptojanin 2 (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Synaptojanin 2 of mouse 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-12141 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Synaptojanin 2 (M-17) is recommended for detection of all mouse Synaptojanin 2 isoforms (α - ζ) and rat synaptojanin 2 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).

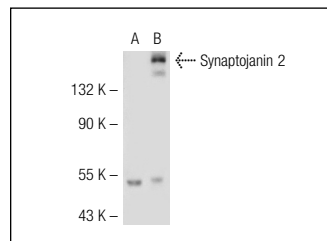
Synaptojanin 2 (M-17) is also recommended for detection of Synaptojanin 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Synaptojanin 2 siRNA (m): sc-39081, Synaptojanin 2 shRNA Plasmid (m): sc-39081-SH and Synaptojanin 2 shRNA (m) Lentiviral Particles: sc-39081-V.

Molecular Weight of Synaptojanin 2 splice variants: 160/165 kDa.

Positive Controls: mouse liver extract: sc-2256 or Synaptojanin 2 (m): 293T Lysate: sc-123864.

DATA



Synaptojanin 2 (M-17): sc-12141. Western blot analysis of Synaptojanin 2 expression in non-transfected: sc-117752 (A) and mouse Synaptojanin 2 transfected: sc-123864 (B) 293T whole cell lysates.

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.

PROTOCOLS

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



Try **Synaptojanin 2 (E-1): sc-390354** or **Synaptojanin 2 (D-11): sc-390247**, our highly recommended monoclonal alternatives to Synaptojanin 2 (M-17).