

Synapsin I Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1059

Specification

Synapsin I Antibody - Product Information

WB, IF
<u>P17599</u>
Human, Mouse, Rat
Rabbit
polyclonal
78 KDa

Synapsin I Antibody - Additional Information

Gene ID	
Gene Name	
Other Names	
Synapsin-1, Synapsin I, SYN1	

Target/Specificity Native protein purified from bovine brain.

Dilution WB~~ 1:1000 IF~~ 1:1000

Format

Prepared from rabbit serum by affinity purification using a column to which the native protein was coupled.

281510 SYN1

Antibody Specificity Specific for the ~78k synapsin I doublet in Western blots of rat brainextracts. Immunolabeling blocked by preadsorption of antibody with the protein used togenerate the antibody.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Synapsin I Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

Synapsin I Antibody - Protocols



Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Synapsin I Antibody - Images



Western blot of 10 ug of rat hippocampal (Hipp) lysate showing specific immunolabeling of the \sim 78k synapsin I doublet protein.



Immunostaining of cultured rat caudate neurons showing punctate distribution of synapsin in green and MAP in red. Cells and photo courtesy of QBMCellScience.

Synapsin I Antibody - Background

Colorado Biosciences Park 12635 East Montview Boulevard, #213 Aurora, CO 80045-7337 Tel: (888) 442-7100 Page 1 of 2 WB = Western Blot IF = Immunofluorescence IHC



= Immunohistochemistry

IP = Immunoprecipitation Packaging: 10 μ g antibody vial; lyophilized from 5 mM ammonium bicarbonate . The antibody should be reconstituted in 50 µl phosphate buffered saline (PBS: 137 mM NaCl, 7.5 mM Na 2 HPO 4 , 2.7 mM KCl, 1.5 mM KH 2 PO 4 , pH 7.4) before use. After reconstitution the antibody should be aliquoted and stored at -20 0 C. Adequate amount of material to conduct 10-mini Western Blots. Storage and Stability: For long term storage -20 0 C is recommended. Stable at -20 0 C for at least 1 year Shipment: Domestic - Ambient; International - Ambient. Anti-Synapsin I Catalog Number: 1925-SYNP Size : 10 µg Product Description: Affinity purified rabbit polyclonal antibody Applications: WB : 1:1000 IHC/IF: 1:1000 IP : 1 µg per 200 µg lysate Antigen: Native protein purified from bovine brain. Species reactivity : The antibody has been directly tested for reactivity in Western blots with rat, mouse and human tissue. **Biological Significance:**

Synapsin I Antibody - References

Feng J, Chi P, Blanpied TA, Xu YM, Magarinos AM, Fe



rreira A, Takahashi RH, Kao HT, McEwen BS, Ryan TA, Augustine GJ, Greengard P (2002) Regulation of neurotransmitter release by synapsin III. J Neurosci 22:4372-4380. Jovanovic JN, Sihra TS, Nairn AC, Hemmings HC, Jr., Gr eengard P, Czernik AJ (2001) Opposing changes in phosphorylation of specific sites in synapsin I during Ca 2 +-dependent glutamate release in isolated nerve terminals. | Neurosci 21:7944-7953. Kao HT, Song HJ, Porton B, Ming GL, Hoh J, Abraham M, Czernik AJ, Pieribone VA, Poo MM, Greengard P (2002) A protein kinase A-dependent molecular switch in synapsin s regulates neurite outgrowth. Nature Neurosci 5:431-437. Moore RY, Bernstein M (1989) Synaptogenesis in the rat suprachiasmatic nucleus demonstrated by electron microscopy and synapsin I immunoreactivity. | Neurosci 9:2151-2162. Nayak AS, Moore CI, Browning MD (1996) CaM kinase II phosphorylation of the presyn aptic protein synapsin is persistently increased during expression of long-term po tentiation. Proc Natl Acad Sci (USA) 93:15451-15456. Stone LM, Browning MD, Finger TE (1994) Differential dist ribution of the synapsins in the rat olfactory bulb. Neurosci 14:301-309. Kurtis D. Davies, Susan M. Goebel-Goody, St even J. Coultrap, and Michael D. Browning (2008) Long Term Synaptic Depression That Is Associated with GluR1 Dephosphorylation but Not -Amino-3-hydroxy-5-methyl-4isoxazolepropionic Acid (AMPA) Receptor Internalization J. Biol. Chem., 283: 33138 - 33146. Note: Dr. Michael Browning, co-author of the cited papers is the President and founder PhosphoSolutions.