219 North Arkansas Street
Rogers, AR 72756
Phone: (479) 636-4361; 800-643-3426
Fax: (479) 636-3562
Email: biosales@pel-freez.com
Website: www.pelfreez-bio.com

PRODUCT DATA SHEET

Product Name: **ANTI-SYNAPSIN I ANTIBODY**

Product Code: P40027-100

Pack Size: 100 µL

Description: Synapsin I plays a key role in synaptic plasticity in the brain (Feng et al., 2002; Nayak et al., 1996). This effect is due in large part to the ability of the synapsins to regulate the availability of synaptic vesicles for release. In addition to its role in plasticity, the expression of synapsin I is a precise indicator of synapse formation (Moore and Bernstein, 1989; Stone et al., 1994). Thus, Synapsin I immunocytochemistry provides a valuable tool for the study of synaptogenesis. The role of synapsin in synaptic plasticity and in synaptogensis is regulated by phosphorylation (Jovanovic et al., 2001; Kao et al., 2002).

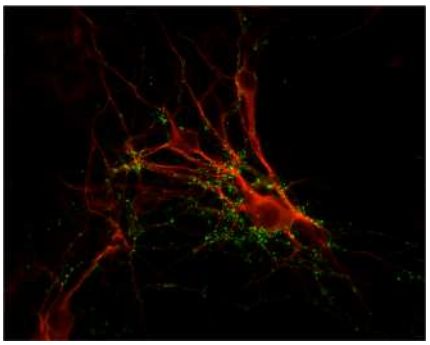
Physical State: Liquid; Buffer contents: 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per mL BSA and 50% glycerol

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

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

Shipping Conditions: Domestic: Blue Ice
International: Blue Ice or Dry Ice

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



Host Species: Rabbit (Polyclonal)

***Mr* (kDa):** 78

Immunogen: Native protein purified from bovine brain. Specific for the ~78k synapsin I protein doublet. Immunolabeling blocked by preadsorption of the antibody with the protein used to generate the antibody.

Species Reactivity: The antibody has been directly tested for reactivity in Western blots with rat, mouse, and human tissue.

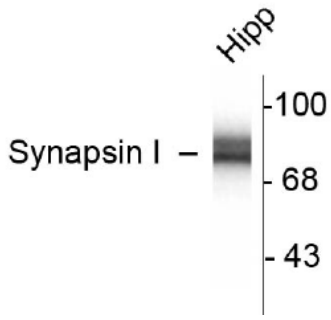
Recommended Antibody Dilutions:

WB: 1:1000
IHC/IF: 1:1000
IP: 5 µL per 200 µg lysate

References:

1) Feng J et al. (2002) *J Neurosci* 22:4372-4380.
2) Jovanovic JN et al. (2001) *J Neurosci* 21:7944-7953.
3) Kao HT et al. (2002) *Nature Neurosci* 5:431-437.
4) Moore RY et al. (1989) *J Neurosci* 9:2151-2162.
5) Nayak AS et al. (1996) *Proc Natl Acad Sci (USA)* 93:15451-15456.
6) Stone LM et al. (1994) *J Neurosci* 14:301-309.

Western Blot
10 µg of rat hippocampal (Hipp) lysate showing specific immunolabeling of the ~78k synapsin I doublet protein



Application Key: WB – Western Blot IF – Immunofluorescence IHC – Immunohistochemistry IP - Immunoprecipitation