

## PRODUCT DATA SHEET

**Product Name:** ANTI-PHOSPHO-Ser<sup>62,67</sup> SYNAPSIN I ANTIBODY

**Product Code:** P40029-100

**Pack Size:** 100 µL

**Description:** Synapsin I plays a key role in synaptic plasticity in 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. The role of synapsin in synaptic plasticity and in synaptogenesis is regulated by phosphorylation (Jovanovic et al., 2001; Kao et al., 2002). Ser<sup>549</sup> along with Ser<sup>62</sup> and Ser<sup>67</sup> are the sites of Synapsin I that are phosphorylated by MAP kinase (Czernik et al., 1987; Jovanovic et al., 1996).

**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 via sequential chromatography on phospho- and dephosphopeptide affinity columns.

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

**Host Species:** Rabbit (Polyclonal)

**Mr (kDa):** 78

**Immunogen:** Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser<sup>62,67</sup> of synapsin I. Specific for ~78k synapsin I doublet phosphorylated at Ser<sup>62,67</sup>. Immunolabeling of the synapsin I band is blocked by preadsorption with the phospho-peptide used as antigen but not by the corresponding dephospho-peptide.

**Species Reactivity:** The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will react with mouse, and bovine tissues based on the fact that these species have 100% homology with the amino acid sequence used as antigen.

**Recommended Antibody Dilutions:**

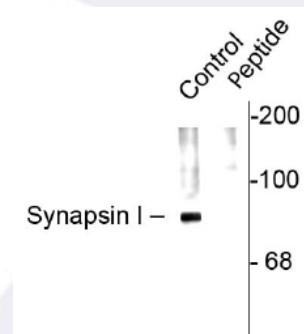
**WB: 1:1000**

### References:

- 1) Czernik AJ et al. (1987) *Proc Natl Acad Sci (USA)* 84:7518-7522.
- 2) Feng J et al. (2002) *J Neurosci* 22:4372-4380.
- 3) Jovanovic JN et al. (1996) *Neurobiology* 93:3679-3683.
- 4) Jovanovic JN et al. (2001) *J Neurosci* 21:7944-7953.
- 5) Kao HT et al. (2002) *Nature Neurosci* 5:431-437.
- 6) Nayak AS et al. (1996) *Proc Natl Acad Sci (USA)* 93:15451-15456.

### Western Blot

Rat cortex lysate showing specific labeling of the ~78k synapsin protein phosphorylated at Ser<sup>62,67</sup> (Control). Immunolabeling is blocked by preadsorption with the phospho-peptide used as antigen (Peptide) but not by the corresponding dephospho-peptide (not shown).



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

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P/N: 74111 Rev 01