10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-Synapsin I (Ser9) Antibody

Our Anti-Synapsin I (Ser9) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions

Catalog # AN1562

Specification

Anti-Synapsin I (Ser9) Antibody - Product Information

Application	**WB**
Primary Accession	P17599
Reactivity	**Bovine, Chicken**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**74518**

Anti-Synapsin I (Ser9) Antibody - Additional Information

Gene ID **281510**

Other Names
Brain protein 4.1 antibody, SYN 1 antibody, SYN 1a antibody, SYN 1b antibody, SYN I antibody, SYN1 antibody, SYN1_HUMAN antibody, SYN1a antibody, SYN1b antibody, Synapsin 1 antibody, Synapsin I antibody, Synapsin-1 antibody, Synapsin1 antibody, SynapsinI antibody, SYNI antibody

Target/Specificity
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. 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 synaptogenesis is regulated by phosphorylation (Jovanovic et al., 2001; Kao et al., 2002). Serine 9 is the site on synapsin I that is phosphorylated by cAMP-dependent protein kinase and by calcium calmodulin kinase I (Czernik et al., 1987). Phosphorylation of this site is thought to regulate synaptic vesicle function and neurite outgrowth (Kao et al., 2002).

Dilution
WB~~1:1000

Format
Antigen Affinity Purified from Pooled Serum

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
Anti-Synapsin I (Ser9) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

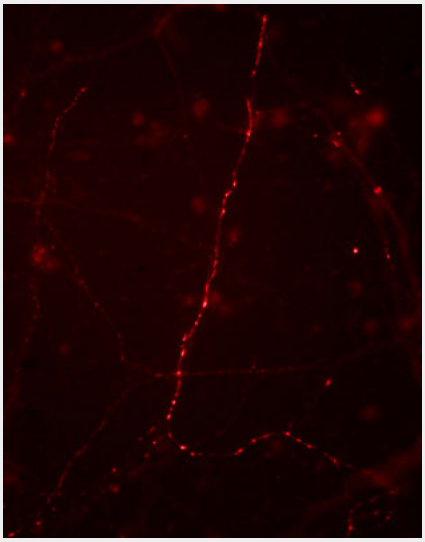
Blue Ice

Anti-Synapsin I (Ser9) Antibody - Protocols

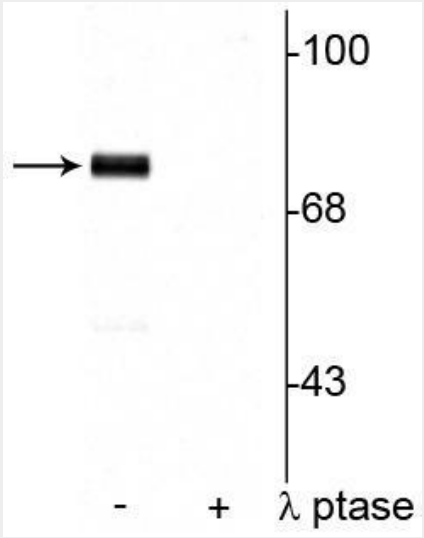
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Synapsin I (Ser9) Antibody - Images



Immunostaining of cultured mouse caudate neurons showing synapsin I when phosphorylated at Ser9 (cat. p1560-9, 1:500, red). Cells and photo courtesy of QBMCellScience.



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Western blot of rat cortical lysate showing specific immunolabeling of the ~78 kDa synapsin I phosphorylated at Ser9 in the first lane (-). Phosphospecificity is shown in the second lane (+) where the immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 minutes).

Anti-Synapsin I (Ser9) Antibody - Background

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. 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 synaptogenesis is regulated by phosphorylation (Jovanovic et al., 2001; Kao et al., 2002). Serine 9 is the site on synapsin I that is phosphorylated by cAMP-dependent protein kinase and by calcium calmodulin kinase I (Czernik et al., 1987). Phosphorylation of this site is thought to regulate synaptic vesicle function and neurite outgrowth (Kao et al., 2002).