

Anti-Synapsin I (Ser603) Antibody

Our Anti-Synapsin I (Ser603) rabbit polyclonal phosphospecific primary antibody from PhosphoSolution Catalog # AN1565

Specification

Anti-Synapsin I (Ser603) Antibody - Product Information

Primary Accession	<u>P17599</u>
Reactivity	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Calculated MW	74518

Anti-Synapsin I (Ser603) 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 antibody, SYN1_HUMAN antibody, SYN1a antibody, SYN1b antibody, Synapsin 1 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. The role of synapsin in synaptic plasticity and in synaptogenesis regulated by phosphorylation (Jovanovic et al., 2001; Kao et al., 2002). Serine 603 is the site on synapsin I that is phosphorylated by calcium calmodulin kinase II and by p21-activated kinases (Sakurada et al., 2002; Czernik et al., 1987). Phosphorylation of this site is thought to regulate synaptic vesicle function (Nayak et al., 1996; Bahler and Greengard, 1987; McGuinness et al., 1989).

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 (Ser603) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

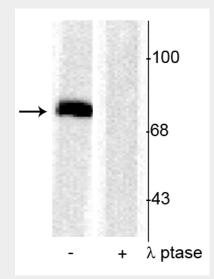
Anti-Synapsin I (Ser603) Antibody - Protocols

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



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

Anti-Synapsin I (Ser603) Antibody - Images



Western blot of rat cortical lysate showing specific immunolabeling of the ~78 kDa synapsin I phosphorylated at Ser603 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 (Ser603) 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. The role of synapsin in synaptic plasticity and in synaptogenesis regulated by phosphorylation (Jovanovic et al., 2001; Kao et al., 2002). Serine 603 is the site on synapsin I that is phosphorylated by calcium calmodulin kinase II and by p21-activated kinases (Sakurada et al., 2002; Czernik et al., 1987). Phosphorylation of this site is thought to regulate synaptic vesicle function (Nayak et al., 1996; Bahler and Greengard, 1987; McGuinness et al., 1989).