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Phospho-Ser549 Synapsin I Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1112

Specification

Phospho-Ser549 Synapsin I Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P17599
Reactivity	**Rat**
Predicted	**Bovine, Human, Mouse, Monkey**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**78 KDa**

Phospho-Ser549 Synapsin I Antibody - Additional Information

Gene ID	**281510**
Gene Name	**SYN1**

Other Names
Synapsin-1, Synapsin I, SYN1

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser549 conjugated to KLH.

Dilution
WB~~ 1:1000
IHC~~ 1:500

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephospho-peptide affinity columns.

Antibody Specificity
Specific for ~78k synapsin I doublet phosphorylated at Ser549.Immunolabeling of the synapsin I band is blocked byλ-phosphatase treatment.

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
Phospho-Ser549 Synapsin I Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

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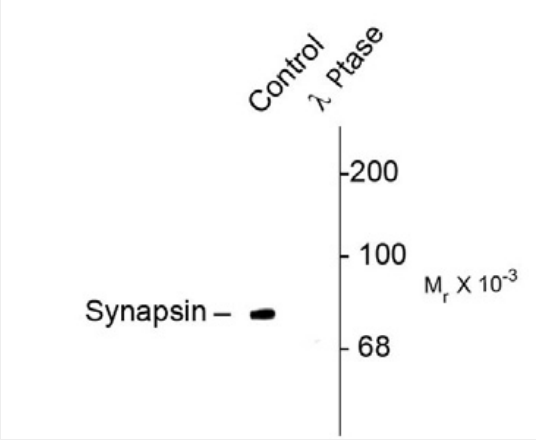
Phospho-Ser549 Synapsin I Antibody - Protocols

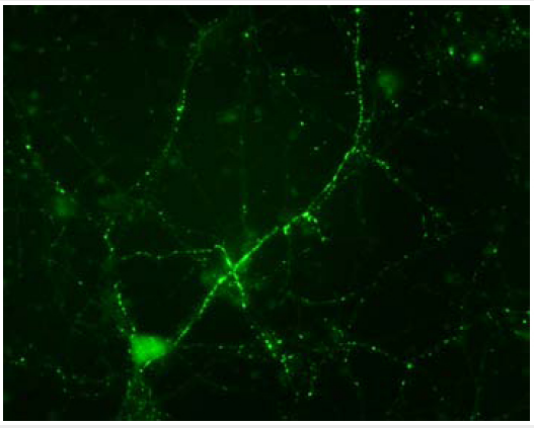
Provided below are standard protocols that you may find useful for product applications.

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

Phospho-Ser549 Synapsin I Antibody - Images



Western blot of rat cortex lysate showing specific immunolabeling of the ~78k synapsin I phosphorylated at Ser549 (Control). Phosphospecificity is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that it was incubated in λ-Ptase (1200 units for 30 min)before being exposed to the phospho Ser549 synapsin I antibody. The immunolabeling is completely eliminated by treatment with λ-Ptase.



Immunostaining of cultured mouse caudate neurons showing synapsin I when phosphorylated at Ser549. Cells and photo courtesy of QBMCellScience.

Phospho-Ser549 Synapsin I 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 ab

ility of the synapsins to regulate the availability of
synaptic vesicles for release. The role of synapsin in synaptic plasticity and in synaptogensis is regulated by
phosphorylation (Jovanovic et al.,
2001; Kao et al., 2002). Ser
549
along with Ser
62
and Ser
67
are the sites of
synapsin I that are phosphorylated by MAP kinase (Jov
anovic et al., 1996). Phosphorylation and subsequent
dephosphorylation of this site is thought to play a key role in synaptic vesicle trafficking.

Phospho-Ser549 Synapsin I Antibody - References

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