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Datasheet for 612-401-C93

Synapsin I phospho S9 Antibody

Overview

Description:	Anti-Synapsin I pS9 (RABBIT) Antibody - 612-401-C93
Item No.:	612-401-C93
Size:	100 µL
Applications:	WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Synapsin I pS9 antibody is directed against rat Synapsin I, which plays a key role in synaptic plasticity in brain. 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. 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. Serine 9 is the site on synapsin I that is phosphorylated by cAMP-dependent protein kinase and by calcium calmodulin kinase I. Phosphorylation of this site is thought to regulate synaptic vesicle function and neurite outgrowth. Anti-Synapsin I pS9 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.
Synonyms:	Synapsin I, SYN1, Synapsin-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Syn1
Reactivity:	Mouse, Rat
PTM Specificity:	Phosphorylation

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Synapsin I pS9 Antibody was produced in rabbit by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser9 of Synapsin I.
Purity/Specificity:	Anti-Synapsin I pS9 antibody is directed against the phosphorylated form of rat Synapsin I at residues pS9. Anti-Synapsin I pS9 antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Immunolabeling is blocked by preadsorption of the antibody with the phosphopeptide used as antigen but not by the corresponding dephosphopeptide. Immunolabeling is also completely eliminated by treatment with lambda phosphatase. Cross-reactivity is expected from the following species based on 100% sequence homology: bovine, human, mouse, Xenopus and zebra fish.
Relevant Links:	• NCBI - NP_001104252.1 • UniProtKB - P09951 • GeneID - 24949

Application Details

Tested Applications:	WB
Application Note:	Anti-Synapsin I pS9 (Rabbit) antibody is tested for use in Western Blotting and ICC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 78 kDa in size corresponding to synapsin I doublet protein phosphorylated at Ser9 in the appropriate cell lysate or extract. This antibody also weakly labels the approximately 55 kDa synapsin II protein which has a similar phosphorylation site to that of Ser9 on synapsin I. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:500
WB:	1:1000

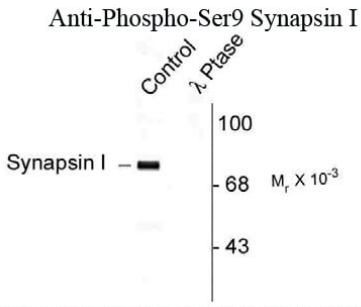
Formulation

Physical State:	Liquid
Concentration:	Titrated value sufficient to run approximately 10 mini blots. Sufficient to run approximately 10 miniblots
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western blot of rat cortex lysate showing specific immunolabeling of the ~78k synapsin I phosphorylated at Ser9 (Control). The phosphospecificity of this labeling 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-Ser9 synapsin I antibody. The immunolabeling is completely eliminated by treatment with λ-Ptase.

Western Blot
Western Blot of Rabbit anti-Synapsin I Ser9 antibody. Lane 1: rat cortex lysate (control). Lane 2: λ-Ptase. Load: 10 µg per lane. Primary antibody: Synapsin I Ser9 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 78 kDa for Synapsin I Ser9. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.