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Datasheet for 612-401-E39

Synaptotagmin phospho S309 Antibody

Overview

Description:	Anti-Synaptotagmin pS309 (RABBIT) Antibody - 612-401-E39
Item No.:	612-401-E39
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Rat
Host Species:	Rabbit

Product Details

Background:	Synaptotagmin 1 pS309 Antibody detects Synaptotagmin 1, which is a synaptic vesicle membrane glycoprotein that is widely expressed throughout the CNS. It is generally thought to act as the Ca2+ sensor in the regulation of exocytosis and neurotransmitter release. Recent studies indicate that synaptotagmin's Ca2+ mediated binding of SNAP25 is essential for the Ca2+ dependent triggering of membrane fusion. It has recently been demonstrated that discrete residues within the c(2)b binding domain of synaptotagmin 1 independently specify endocytic rate and synaptic vesicle size. Synaptotagmin can be phosphorylated by multiple protein kinases and this may play a key role in modulation of synaptotagmin's ability to influence both the exocytotic and endocytotic components of synaptic transmission. Anti-Synaptotagmin 1 pS309 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.
Synonyms:	Synaptotagmin-1, Synaptotagmin I, SytI, p65, Syt1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Syt1
Reactivity:	Rat
PTM Specificity:	Phosphorylation

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Synaptotagmin pS309 Antibody was produced in rabbit by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser309 of Synaptotagmin.
Purity/Specificity:	Anti-Synaptotagmin 1 pS309 Antibody is directed against rat Synaptotagmin 1 phosphorylated at pS309. Synaptotagmin antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity is expected from the following species based on 100% sequence homology: bovine, canine, chicken, human, mouse, non-human primate and zebra fish. Cross-reactivity with from other species has not been determined.
Relevant Links:	• UniProtKB - P21707 • GeneID - 25716 • UniProtKB - P21707.3

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Synaptotagmin pS309 antibody is tested for use in Western Blotting and IHC. Expect a band of approximately 60-62 kDa in size corresponding to synaptotagmin protein phosphorylated at Ser309 in the appropriate cell lysate or extract. 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:	1:400
WB:	1:1000

Formulation

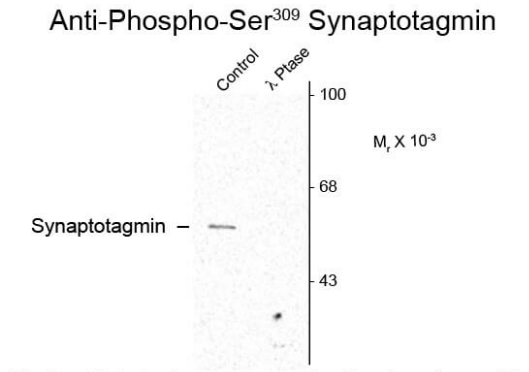
Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

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 phosphospecific immunolabeling of the ~60k and ~62k synaptotagmin phosphorylated at Ser^{309}.

Western Blot

Western Blot of Rabbit anti-Synaptotagmin pS309 antibody. Lane 1: rat cortex lysate (control). Lane 2: λ-Ptase. Load: 10 µg per lane. Primary antibody: Synaptotagmin pS309 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: 60-62 kDa for Synaptotagmin pS309. 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.