

Phospho-Ser234 Rabphilin 3A Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1114**Specification**

Phospho-Ser234 Rabphilin 3A Antibody - Product Information

Application	WB
Primary Accession	P47709
Reactivity	Rat
Predicted	Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	82 KDa

Phospho-Ser234 Rabphilin 3A Antibody - Additional Information

Gene ID	171039
Gene Name	RPH3A
Other Names	
Rabphilin-3A, Exophilin-1, Rph3a	

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser234 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

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

Antibody Specificity

Specific for the ~82k rabphilin protein phosphorylated at Ser234. The immunolabeling of the rabphilin band was completely blocked by the phosphopeptide used as antigen while the dephosphopeptide had no effect on the immunolabeling

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-Ser234 Rabphilin 3A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

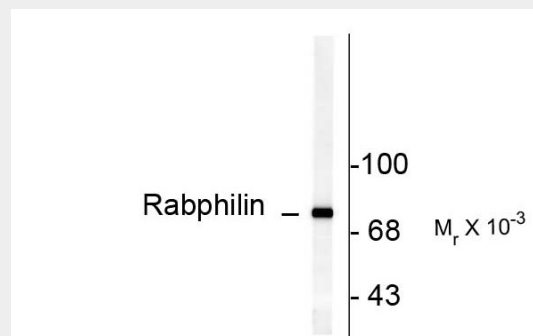
Blue Ice

Phospho-Ser234 Rabphilin 3A 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 Cytometry](#)
- [Cell Culture](#)

Phospho-Ser234 Rabphilin 3A Antibody - Images



Western blot of rat brain lysate showing specific immunolabeling of the ~82k rabphilin 3A phosphorylated at Ser234.

Phospho-Ser234 Rabphilin 3A Antibody - Background

Rabphilin-3A is a peripheral membrane protein that binds Ca^{2+} and phospholipids and is attached to synaptic vesicle membranes (Geppert et al., 1994; Li et al., 1994). The expression of rabphilin 3A is reduced in an animal model of Huntington's disease (Smith et al., 2005). Rabphilin can be phosphorylated at Ser234 by both CAM kinase II and PKA and this phosphorylation has been suggested to regulate neuronal activity during development in a synapse-specific manner (Fykse et al., 1995; Foletti and Scheller, 2001).

Phospho-Ser234 Rabphilin 3A Antibody - References

Foletti DL, Scheller RH (2001) Developmental regulation and specific brain distribution of phosphorabphilin. *J Neurosci* 21:5461-5472.
Fykse EM, Li C, Südhof TC (1995) Phosphorylation of rabphilin-3A by Ca^{2+} /calmodulin- and cAMP-dependent protein kinases in vitro. *J Neurosci* 15:2385-2395.
Geppert M, Bolshakov VY, Siegelbaum SA, Takei K, De Camilli P, Hammer RE, Südhof TC (1994) The role of Rab3A in neurotransmitter release. *Nature (Lond)* 369:493-497.
Li C, Takei K, Geppert M, Daniell L, Stenius K, Chapman ER, Jahn R, De Camilli P, Südhof TC (1994) Synaptic targeting of rabphilin-3A, a synaptic vesicle Ca^{2+} /phospholipid-binding protein, depends on

rab3A/3C. Neuron 13:885-898.

Smith R, Petersen A, Bates GP, Brundin P, Li JY (2005) Depletion of rabphilin 3A in a transgenic mouse model (R6/1) of Huntington's disease, a possible culprit in synaptic dysfunction. Neurobiol Dis 20:673-684.

Sergio Leal-Ortiz, Clarissa L. Waites, Ryan Terry-Lorenzo, Pedro Zamorano, Eckart D. Gundelfinger, and Craig C. Garner (2008)

Piccolo modulation of Synapsin1a dynamics regulates synaptic vesicle exocytosis

J. Cell Biol., 181: 831 - 846