abcam

Product datasheet

Anti-Spinophilin/Neurabin 2 antibody ab203275

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Overview

Product name Anti-Spinophilin/Neurabin 2 antibody

Description Rabbit polyclonal to Spinophilin/Neurabin 2

Host species Rabbit

Tested applications Suitable for: ⊮C-P

Species reactivity Reacts with: Rat

Immunogen Synthetic peptide within Human Spinophilin/Neurabin 2 aa 350-450 conjugated to keyhole limpet

haemocyanin. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the

antibody for your needs, please **contact** our Scientific Support team to discuss your

requirements.

Database link: Q96SB3

Run BLAST with
Run BLAST with

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Proclin 300

Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X

Purity Protein A purified

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab203275 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100 - 1/500. When using a fluorescent probe the recommended dilution is 1/50 – 1/200

Target

Function

Seems to act as a scaffold protein in multiple signaling pathways. Modulates excitatory synaptic transmission and dendritic spine morphology. Binds to actin filaments (F-actin) and shows cross-linking activity. Binds along the sides of the F-actin. May play an important role in linking the actin cytoskeleton to the plasma membrane at the synaptic junction. Believed to target protein phosphatase 1/PP1 to dendritic spines, which are rich in F-actin, and regulates its specificity toward ion channels and other substrates, such as AMPA-type and NMDA-type glutamate receptors. Plays a role in regulation of G-protein coupled receptor signaling, including dopamine D2 receptors and alpha-adrenergic receptors. May establish a signaling complex for dopaminergic neurotransmission through D2 receptors by linking receptors downstream signaling molecules and the actin cytoskeleton. Binds to ADRA1B and RGS2 and mediates regulation of ADRA1B signaling. May confer to Rac signaling specificity by binding to both, RacGEFs and Rac effector proteins. Probably regulates p70 S6 kinase activity by forming a complex with TIAM1 (By similarity). Required for hepatocyte growth factor (HGF)-induced cell migration.

Sequence similarities

Post-translational modifications

Contains 1 PDZ (DHR) domain.

Stimulation of D1 (but not D2) dopamine receptors induces Ser-94 phosphorylation.

Dephosphorylation of Ser-94 is mediated mainly by PP1 and to a lesser extent by PP2A.

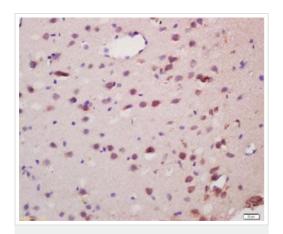
Phosphorylation of spinophilin disrupts its association with F-actin, but does not affect its binding

to PP1.

Cellular localization

Cytoplasm > cytoskeleton. Nucleus. Cell projection > dendritic spine. Cell junction > synapse. Cell junction > adherens junction. Cytoplasm. Cell membrane. Cell projection > lamellipodium. Cell projection > filopodium. Cell projection > ruffle membrane. Enriched at synapse and cadherin-based cell-cell adhesion sites. In neurons, both cytosolic and membrane-associated, and highly enriched in the post-synaptic density apposed to exitatory synapses. Colocalizes with PPP1R2 at actin-rich adherens junctions in epithelial cells and in dendritic spines (By similarity). Accumulates in the lamellipodium, filopodium and ruffle membrane in response to hepatocyte growth factor (HGF) treatment.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Spinophilin/Neurabin 2 antibody (ab203275)

Immunohistochemical analysis of formalin-fixed and paraffinembedded rat brain tissue labeling Spinophilin/Neurabin 2 with ab203275 at 1/200 dilution followed by conjugation to the secondary antibody and DAB staining.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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