

Anti-Spinophilin Antibody

Rabbit polyclonal antibody to Spinophilin Catalog # AP61345

Specification

Anti-Spinophilin Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>O965B3</u> <u>O6R891</u> Human, Mouse, Rat Rabbit Polyclonal 89334

Anti-Spinophilin Antibody - Additional Information

Gene ID 84687

Other Names PPP1R6; Neurabin-2; Neurabin-II; Protein phosphatase 1 regulatory subunit 9B; Spinophilin

Target/Specificity Recognizes endogenous levels of Spinophilin protein.

Dilution WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-Spinophilin Antibody - Protein Information

Name PPP1R9B

Synonyms PPP1R6

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.

Cellular Location

Cytoplasm, cytoskeleton. Nucleus. Cell projection, dendritic spine

{ECO:0000250|UniProtKB:O35274}. Postsynaptic density {ECO:0000250|UniProtKB:O35274}. Synapse. Cell junction, adherens junction. Cytoplasm. Cell membrane. Cell projection, lamellipodium. Cell projection, filopodium. Cell projection, ruffle membrane. Note=Enriched at synapse and cadherin-based cell-cell adhesion sites. In neurons, both cytosolic and membrane-associated, and highly enriched in the postsynaptic 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.

Anti-Spinophilin Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Spinophilin Antibody - Images



Western blot analysis of Spinophilin expression in U87MG (A), Myla2059 (B) whole cell lysates.

Anti-Spinophilin Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Spinophilin. The exact sequence is proprietary.