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Datasheet for 600-401-216

Frequenin Antibody

Overview

Description:	Anti-Frequenin (RABBIT) Antibody - 600-401-216
Item No.:	600-401-216
Size:	100 µg
Applications:	IF, Multiplex, EM, IP, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Frequenin, or Neuronal calcium sensor, is a regulator of G protein-coupled receptor phosphorylation in a calcium dependent manner. It directly regulates GRK1 (RHOK), but not GRK2 to GRK5. It can substitute for calmodulin and it stimulates PI4KB kinase activity. It is involved in long-term synaptic plasticity through its interaction with PICK1. Ncs1 may also play a role in neuron differentiation through inhibition of the activity of N-type voltage-gated calcium channel.
Synonyms:	rabbit anti-FREQUENIN antibody, NCS-1, FLUP, FREQ, Neuronal calcium sensor 1, frequenin homolog antibody, Frequenin-like protein antibody, NCS 1 antibody, NCS1 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Ncs1
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein
Immunogen:	Frequenin (recombinant from Mouse with extensive post-translational modifications)

Purity/Specificity:	This product was prepared from monospecific antiserum by immunoaffinity chromatography using Frequenin (recombinant) coupled to agarose beads. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum.
Relevant Links:	• UniProtKB - Q8BNY6 • NCBI - NP_062655.1 • GeneID - 14299

Application Details

Tested Applications:	IF, Multiplex
Suggested Applications:	EM, IP, WB (Based on references)
Application Note:	This product was assayed by immunoblot and found to be reactive against Frequenin at a dilution of 1:5000 followed by reaction with Peroxidase conjugated Affinity Purified anti-Rabbit IgG [H&L] (Goat) code #611-1302. Anti-Frequenin is suitable for the detection by immunoblot of human, mouse and rat Frequenin. Anti-Frequenin has also been tested for use in IF using Hippocampal neurons of 17 day old NMRI mice.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IF:	1:100-1:2500
WB:	1:500- 1:2,000

Formulation

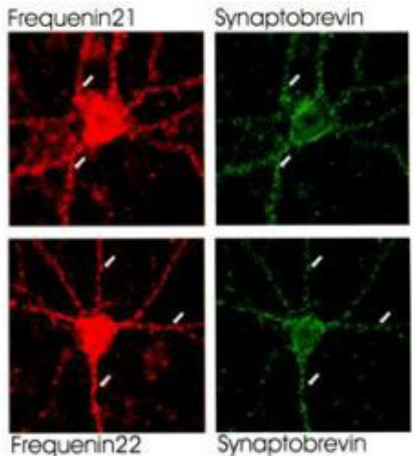
Physical State:	Liquid (sterile filtered)
Concentration:	2.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy
Hippocampal neurons were prepared from 17 d old NMRI mice and grown as described previously (G. Grosse et al., (2000) J. Neurosci. 20: 1869-1882). The figure shows the distribution of neuronal calcium sensor-1 (NCS-1) (red) and synaptobrevin (green) in hippocampal cell cultures after 19 d in vitro. Numerous synapses immunoreactive for synaptobrevin also show NCS-1 immunoreactivity. NCS-1 derived from invertebrate homologs has been referred to as frequenin.

References

- Kabbani N. et al. Interaction with neuronal calcium sensor NCS-1 mediates desensitization of the D2 dopamine receptor. *J Neurosci.* (2002)

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