

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

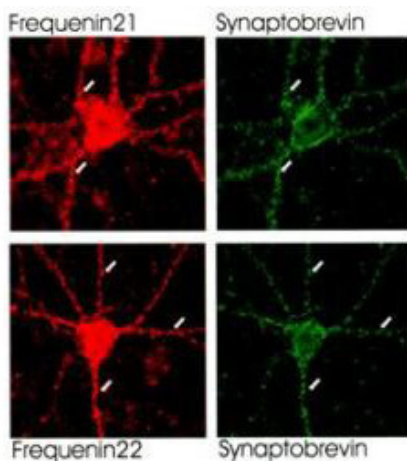
Stabilizer: None

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)

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.