10320 Camino Santa Fe, Suite G
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FREQ Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14572a

Specification

FREQ Antibody (N-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P62166
Other Accession	Q91614, P62168, Q8BNY6, P62167, Q2V8Y7, NP_001122298.1, NP_055101.2
Reactivity	**Human**
Predicted	**Bovine, Chicken, Mouse, Rat, Xenopus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**21879**
Antigen Region	**1-30**

FREQ Antibody (N-term) - Additional Information

Gene ID 23413

Other Names
Neuronal calcium sensor 1, NCS-1, Frequenin homolog, Frequenin-like protein, Frequenin-like ubiquitous protein, NCS1, FLUP, FREQ

Target/Specificity
This FREQ antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human FREQ.

Dilution
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
FREQ Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FREQ Antibody (N-term) - Protein Information

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Name NCS1

Synonyms FLUP, FREQ

Function Neuronal calcium sensor, regulator of G protein-coupled receptor phosphorylation in a calcium dependent manner. Directly regulates GRK1 (RHOK), but not GRK2 to GRK5. Can substitute for calmodulin (By similarity). Stimulates PI4KB kinase activity (By similarity). Involved in long-term synaptic plasticity through its interaction with PICK1 (By similarity). May also play a role in neuron differentiation through inhibition of the activity of N-type voltage- gated calcium channel (By similarity).

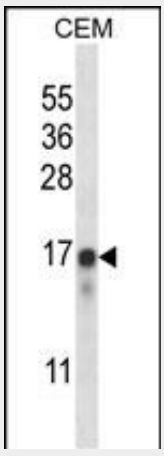
Cellular Location
Golgi apparatus. Postsynaptic density. Cytoplasm, perinuclear region. Cytoplasm {ECO:0000250|UniProtKB:P62168}. Cell membrane; Peripheral membrane protein. Membrane {ECO:0000250|UniProtKB:P62168}; Lipid-anchor Note=Associated with Golgi stacks. Post-synaptic densities of dendrites, and in the pre-synaptic nerve terminal at neuromuscular junctions. {ECO:0000305, ECO:0000305|PubMed:17555535}

FREQ Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FREQ Antibody (N-term) - Images



FREQ Antibody (N-term) (Cat. #AP14572a) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the FREQ antibody detected the FREQ protein (arrow).

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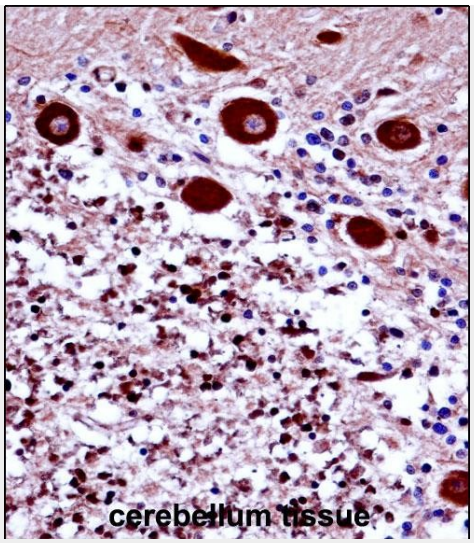

FREQ Antibody (N-term) (AP14572a)immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of FREQ Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

FREQ Antibody (N-term) - Background

This gene is a member of the neuronal calcium sensor gene family, which encode calcium-binding proteins expressed predominantly in neurons. The protein encoded by this gene regulates G protein-coupled receptor phosphorylation in a calcium-dependent manner and can substitute for calmodulin. The protein is associated with secretory granules and modulates synaptic transmission and synaptic plasticity. Multiple transcript variants encoding different isoforms have been found for this gene.

FREQ Antibody (N-term) - References

Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :
Handley, M.T., et al. PLoS ONE 5 (5), E10534 (2010) :
Torres, K.C., et al. Prog. Neuropsychopharmacol. Biol. Psychiatry 33(2):229-234(2009)
Szafranski, K., et al. Genome Biol. 8 (8), R154 (2007) :
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