

#### NCS-1 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10526

#### Specification

## NCS-1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P62166</u> <u>AAP97256</u> Human, Rat Rabbit Polyclonal Rabbit IgG 21879

### NCS-1 Antibody - Additional Information

Gene ID 23413

Application & Usage

Western blotting (0.5-4  $\mu$ g/ml). However, the optimal concentrations should be determined individually. Rat kidney tissue lysate can be used as a positive control. The antibody recognizes ~24 kDa NCS-1 from samples of human and rat origins. Reactivity to other species has not been determined.

Other Names FREQ , FLUP , NCS1 , ANTI NEURONAL CALCIUM SENSOR 1 , Frequenin , NCS-1

Target/Specificity NCS-1

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** 100  $\mu$ g (0.5 mg/ml) Protein A affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 



Precautions

NCS-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **NCS-1 Antibody - Protein Information**

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}

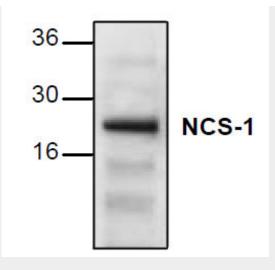
#### **NCS-1 Antibody - Protocols**

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>

NCS-1 Antibody - Images





Western blot analysis of NCS-1 with rat kidney tissue lysate.

# NCS-1 Antibody - Background

The neuronal calcium sensor (NCS) protein binds to calcium thro µgh EF-hand motifs, are expressed in neurons. They are implicated in the regulation of neurotransmitters released at the neuromuscular junctions. NCS-1 is widely distributed in the brain, spinal cord and dorsal root ganglia. It has been shown to regulate neurosecreation in a calcium-dependent manner, potentiates nitric oxide synthase activity. NCS-1 has been reserved to indicate the protein observed in humans and mammals.