

Rabbit Anti-NCS1 antibody

SL11977R

Product Name NCS1

Chinese Name 神经钙传感蛋白 1/Frequenin 抗体

Alias 9430075O15Rik; A730032G13Rik; AI836659; DKFZp761L1223; FLUP; Frequenin; Frequenin homolog (Drosophila); Frequenin homolog; Frequenin like protein; Frequenin, Drosophila, homolog of; Frequenin-like protein; Frequenin-like ubiquitous protein; Mfreq; NCS 1; NCS-1; ncs1; NCS1_HUMAN; Neuronal calcium sensor 1; Neuronal Calcium Sensor 1.

Research Area Cell biology Neurobiology Signal transduction Binding protein

Immunogen Species Rabbit

Clonality Polyclonal

React Species Rat(predicted:Human,Mouse,Cow)

Applications IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 22kDa

Cellular localization cytoplasmic The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human NCS1: 1-50/190

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic

or diagnostic applications.

PubMed

[PubMed](#)

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. [provided by RefSeq, Jul 2008]

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.

Subunit:

Interacts with KCND2. Interacts in a calcium-independent manner with PI4KB. This binding competes with CALN2/CABP7 binding to PI4KB (By similarity). Interacts with ARF1, ARF3, ARF5 and ARF6. Interacts in a calcium-dependent manner with PICK1 (via AH domain) (By similarity). Interacts with IL1RAPL1.

Product Detail

Subcellular Location:

Golgi apparatus, Golgi stack membrane. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cytoplasm, perinuclear region. Cell membrane. Associated with Golgi stacks. Post-synaptic densities of dendrites, and in the pre-synaptic nerve terminal at neuromuscular junctions.

Similarity:

Belongs to the recoverin family.
Contains 4 EF-hand domains.

SWISS:

P62166

Gene ID:

23413

Database links:

[Entrez Gene: 23413](#) Human

[Entrez Gene: 14299](#) Mouse

[Entrez Gene: 65153](#) Rat

[Omim: 603315](#) Human

[SwissProt: P62166](#) Human

[SwissProt: Q8BNY6](#) Mouse

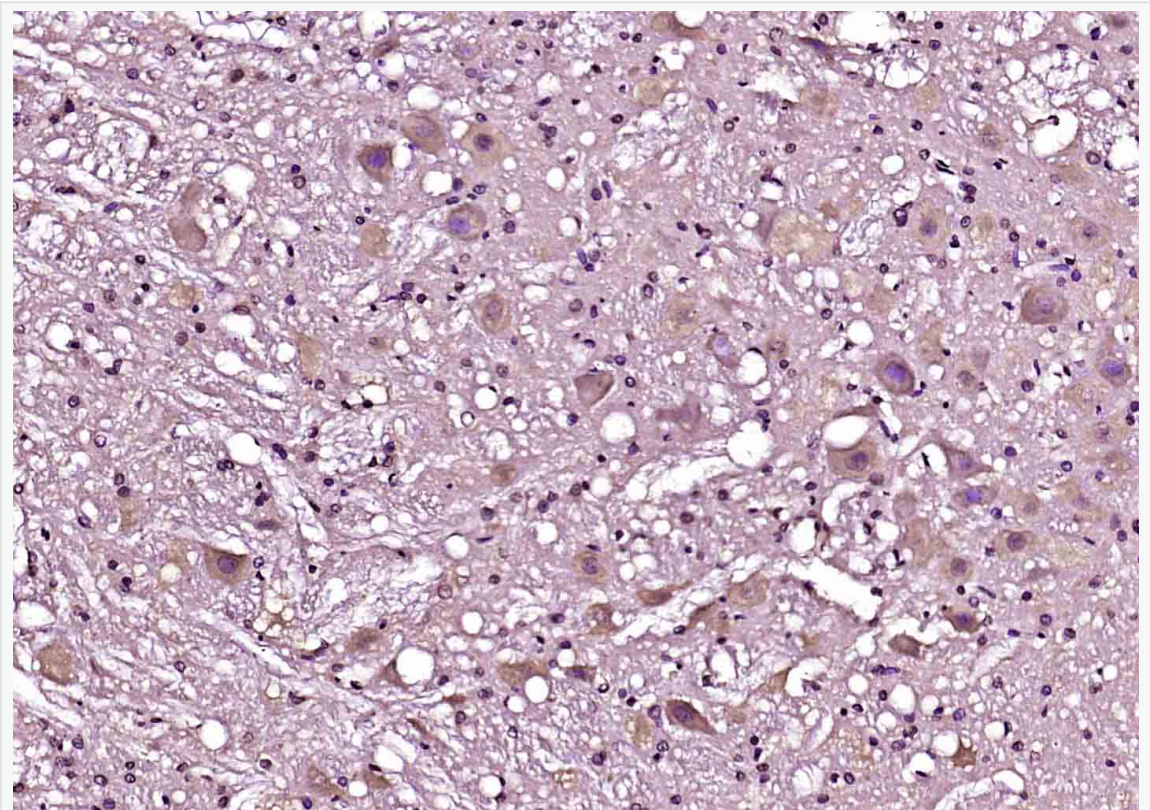
[SwissProt: P62168](#) Rat

[Unigene: 642946](#) Human

[Unigene: 249318](#) Mouse

[Unigene: 62653](#) Rat

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in



sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NCS1) Polyclonal Antibody, Unconjugated (SL11977R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.