

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 Calicum Sensor 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	22kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NCS1:1-50/190
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

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 presynaptic 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
	<u>SwissProt: P62168</u> Rat
	Unigene: 642946 Human
	Unigene: 249318 Mouse
	<u>Unigene: 62653</u> Rat
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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.