10320 Camino Santa Fe, Suite G
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NCS1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1551c

Specification

NCS1 Antibody (Center) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	P62166
Other Accession	Q91614, P62168, Q8BNY6, P62167, Q2V8Y7, NP_055101.2
Reactivity	**Human**
Predicted	**Bovine, Chicken, Mouse, Rat, Xenopus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**21879**
Antigen Region	**118-144**

NCS1 Antibody (Center) - 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 NCS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 118-144 amino acids from the Central region of human NCS1.

Dilution
FC~~1:10~50
IHC-P~~1:50~100
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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
NCS1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NCS1 Antibody (Center) - 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).

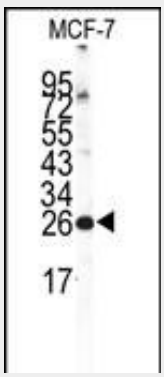
Cellular Location
Golgi apparatus. Postsynaptic density. Cytoplasm, perinuclear region. Cytoplasm {ECO:0000250|UniProtKB:P62168}. Cell membrane; Peripheral membrane protein. Membrane {ECO:0000250|UniProtKB:P62168}; Lipid-anchor Note=Associated with Golgi stacks. Post-synaptic densities of dendrites,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

NCS1 Antibody (Center) - 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

NCS1 Antibody (Center) - Images



Western blot analysis of NCS1 Antibody (Center) (Cat.# AP1551c) in MCF-7 cell line lysates (35ug/lane). NCS1 (arrow) was detected using the purified Pab.

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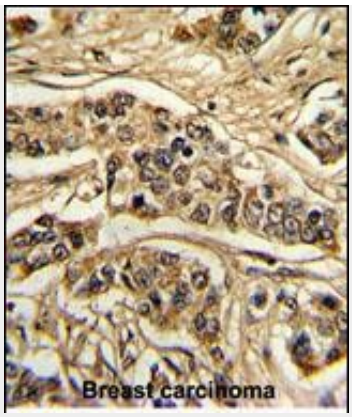
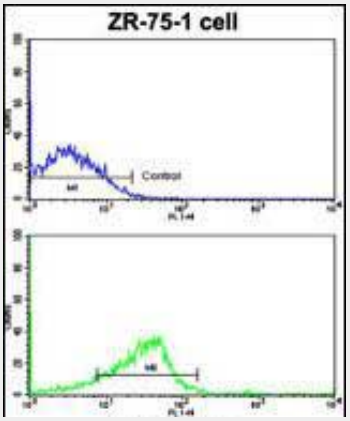


Formalin-fixed and paraffin-embedded human breast carcinoma reacted with NCS1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of ZR-75-1 cells using NCS1 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

NCS1 Antibody (Center) - Background

NCS1 is a member of the neuronal calcium sensor gene family, which encode calcium-binding proteins expressed predominantly in neurons. NCS1 regulates G protein-coupled receptor phosphorylation in a calcium-dependent manner and can substitute for calmodulin. This protein is thought to be associated with secretory granules and may be involved in the regulation of neurosecretion.

NCS1 Antibody (Center) - References

Koh, P.O., et al., Proc. Natl. Acad. Sci. U.S.A. 100(1):313-317 (2003).
Bourne, Y., et al., J. Biol. Chem. 276(15):11949-11955 (2001).
Burgoyne, R.D., et al., Biochem. J. 353 (Pt 1), 1-12 (2001).