

**NCS1 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1551c****Specification**

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**NCS1 Antibody (Center) - Product Information**

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

**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**WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50**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**

**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**

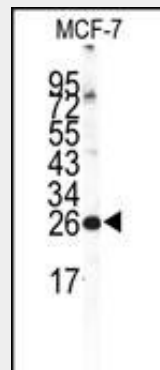
Golgi apparatus. Postsynaptic density. Cytoplasm, perinuclear region. Cytoplasm {ECO:0000250|UniProtKB:P62168}. Cell membrane; Peripheral membrane protein. Membrane {ECO:0000250|UniProtKB:P62168}; Lipid-anchor Note=Associated with Golgi stacks. Post-synaptic densities of dendrites, and in the pre-synaptic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

**NCS1 Antibody (Center) - Protocols**

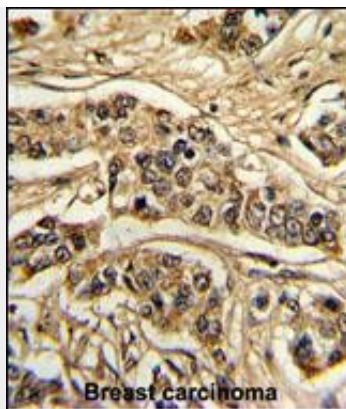
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

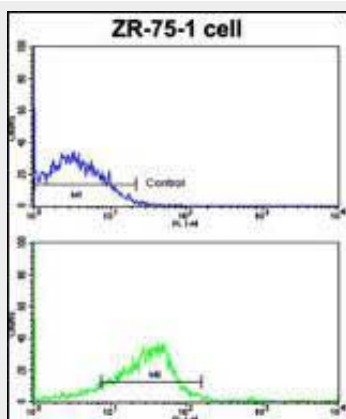
**NCS1 Antibody (Center) - Images**



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.



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).