Product Name: **KD-Validated Neuronal Calcium Sensor 1 Recombinant Rabbit Monoclonal Antibody**

Catalog #: **KVAb01018**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 21.9kDa

Antigen Information

Gene Name	NCS1
Alternative Names	NCS1; Neuronal Calcium Sensor 1; NCS-1; FREQ; Frequenin-Like Ubiquitous Protein 1; Frequenin-Like Protein 1; Frequenin Homolog; FLUP; Frequenin (Drosophila) Homolog; Frequenin Homolog (Drosophila)
Gene ID	23413.0
SwissProt ID	P62166
Immunogen	A synthesized peptide derived from human NCS1

Background

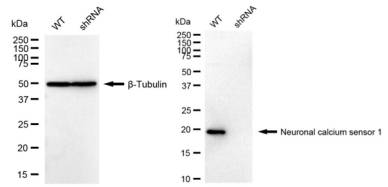
This gene is a member of the neuronal calcium sensor gene family, which encode calcium-binding proteins expressed

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]

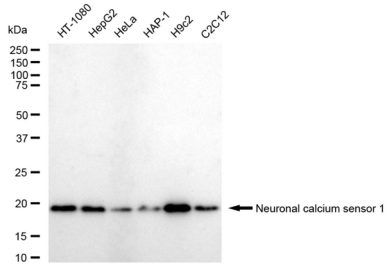
Research Area

Neuroscience

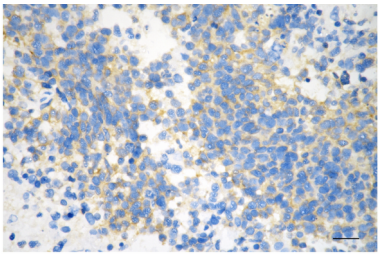
Image Data



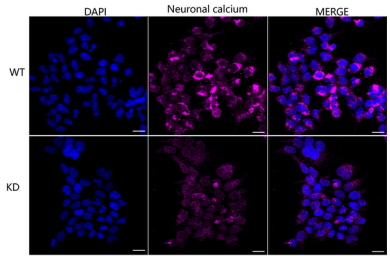
Western blotting analysis using Neuronal calcium sensor 1 antibody (KVAb01018). Neuronal calcium sensor 1 expression in wild type (WT) and Neuronal calcium sensor 1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with Neuronal calcium sensor 1 antibody (KVAb01018, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



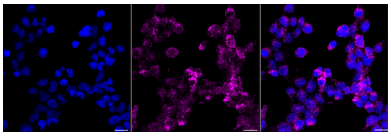
Western blotting analysis using Neuronal calcium sensor 1 antibody (KVAb01018). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Neuronal calcium sensor 1 antibody (KVAb01018, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



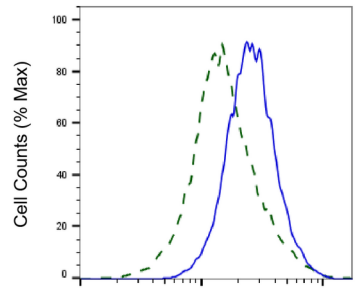
Immunohistochemistry was performed on paraffin-embedded human glioblastoma using neuronal calcium sensor 1 antibody (KVAb01018, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using neuronal calcium sensor 1 antibody (KVAb01018, 1:1,000), Top panel: wild-type (WT); Bottom panal: neuronal calcium sensor 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Neuronal calcium sensor 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.

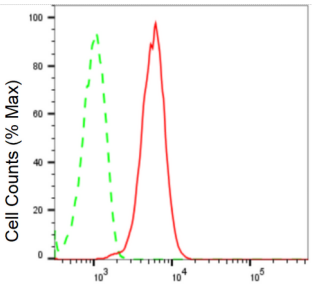


Immunocytochemical staining of HepG2 cells with Neuronal calcium sensor 1 antibody (KVAb01018, 1:1,000). Nuclei were stained blue with DAPI; Neuronal calcium sensor 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.



Neuronal calcium sensor 1-Alexa Fluor® 647

Validation of Neuronal calcium sensor 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Neuronal calcium sensor 1 antibody (KVAb01018, 1:2,000) and analyzed using BD flow cytometer.



Neuronal calcium sensor 1-Alexa Fluor® 647

Flow cytometric analysis of Neuronal calcium sensor 1 expression in HepG2 cells using Neuronal calcium sensor 1 antibody (KVAb01018, 1:2,000). Green, isotype control; red, Neuronal calcium sensor 1.