

calsyntenin-2 (S-15): sc-102402

BACKGROUND

Members of the calsyntenin protein family are localized to the post-synaptic membrane of excitatory central nervous system (CNS) synapses. Calsyntenin-2, also known as Alcadin- γ , is a 955 amino acid protein that localizes to the endoplasmic reticulum, Golgi apparatus and plasma membranes. Containing 2 cadherin-like repeats in its N-terminal extracellular region, calsyntenin-2 binds synaptic calcium with its cytoplasmic domain, suggesting a role in the modulation of calcium-mediated postsynaptic signals. Under normal physiological conditions, calsyntenin-2 is proteolytically processed in an event in which the primary ζ -cleavage generates a short C-terminal transmembrane fragment and a long extracellular N-terminal domain.

REFERENCES

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6. Suzuki, T., et al. 2006. Trafficking of Alzheimer's disease-related membrane proteins and its participation in disease pathogenesis. *J. Biochem.* 139: 949-955.
7. Cheng, X.R., et al. 2006. The family of calsyntenins: learning and memory related genes. *Sheng Li Ke Xue Jin Zhan* 37: 205-210.
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CHROMOSOMAL LOCATION

Genetic locus: CLSTN2 (human) mapping to 3q23.

SOURCE

calsyntenin-2 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of calsyntenin-2 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102402 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

calsyntenin-2 (S-15) is recommended for detection of calsyntenin-2 of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family members calsyntenin-1 or calsyntenin-3.

Suitable for use as control antibody for calsyntenin-2 siRNA (h): sc-78162, calsyntenin-2 shRNA Plasmid (h): sc-78162-SH and calsyntenin-2 shRNA (h) Lentiviral Particles: sc-78162-V.

Molecular Weight of calsyntenin-2: 107 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.