

calsyntenin-3 (D-16): sc-133316

BACKGROUND

Members of the calsyntenin protein family localize to the post-synaptic membrane of excitatory central nervous system (CNS) synapses. Calsyntenin-3, also known as CSTN3, alc β or CLSTN3, is a 956 amino acid single-pass type I membrane protein that localizes to the membrane of the endoplasmic reticulum and the Golgi apparatus. Expressed predominantly in brain and kidney, calsyntenin-3 contains two cadherin-like repeats in its N-terminal extracellular region and binds synaptic calcium with its cytoplasmic domain, suggesting that calsyntenin-3 plays a role in the modulation of calcium-mediated postsynaptic signals. Under normal physiological conditions, calsyntenin-3 is proteolytically processed in an event in which primary ζ -cleavage generates a short C-terminal transmembrane fragment and a long extracellular N-terminal domain. The tripartite complex, which consist of calsyntenin-3, X11 β and Amyloid A4, inhibits intracellular Amyloid A4 maturation by stabilizing Amyloid A4 metabolism and enhancing X11 β -mediated suppression of β -Amyloid.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CLSTN3 (human) mapping to 12p13.31; Clstn3 (mouse) mapping to 6 F2.

SOURCE

calsyntenin-3 (D-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of calsyntenin-3 of human origin.

PRODUCT

Each vial contains 100 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-133316 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

calsyntenin-3 (D-16) is recommended for detection of calsyntenin-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with calsyntenin-1 or calsyntenin-2.

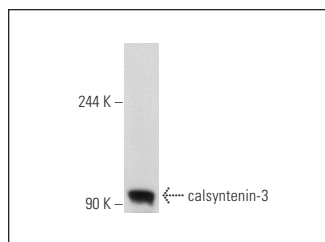
calsyntenin-3 (D-16) is also recommended for detection of calsyntenin-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for calsyntenin-3 siRNA (h): sc-95768, calsyntenin-3 siRNA (m): sc-141987, calsyntenin-3 shRNA Plasmid (h): sc-95768-SH, calsyntenin-3 shRNA Plasmid (m): sc-141987-SH, calsyntenin-3 shRNA (h) Lentiviral Particles: sc-95768-V and calsyntenin-3 shRNA (m) Lentiviral Particles: sc-141987-V.

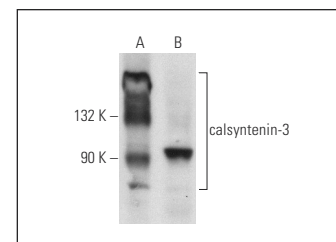
Molecular Weight of calsyntenin-3: 106 kDa.

Positive Controls: mouse brain extract: sc-2253, WI 38 whole cell lysate: sc-364260 or mouse prostate extract: sc-364249.

DATA



calsyntenin-3 (D-16): sc-133316. Western blot analysis of calsyntenin-3 expression in WI 38 whole cell lysate.



calsyntenin-3 (D-16): sc-133316. Western blot analysis of calsyntenin-3 expression in mouse brain (A) and mouse prostate (B) tissue extracts.

STORAGE

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

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.