

L-type Ca⁺⁺ CP γ 6 (N-13): sc-67458

BACKGROUND

Voltage-dependent calcium channels are important for the release of neurotransmitters in neurons. L-type (long lasting current) voltage-dependent calcium channels are composed of four subunits: an α 1 subunit, a β subunit, a γ subunit and an α 2 δ subunit. The γ subunit is encoded by eight genes, γ 1- γ 8 and functions by influencing the properties of calcium current. L-type Ca⁺⁺ CP γ 6 (voltage-dependent calcium channel subunit γ 6), also called CACNG6, belongs to the CACNG subfamily of the PMP-22/EMP/MP20 family. It is a membrane protein with four transmembrane domains, an N-linked glycosylation site in the first extracellular loop and cytoplasmic N- and C-termini. CACNG is expressed in a variety of tissues including fetal and adult brain. L-type Ca⁺⁺ CP γ 6 is most closely related to family member CACNG1. Both subunits lack the PSD-95/DLG/ZO-1(PDZ) binding motif. L-type Ca⁺⁺ CP γ 6 may function to stabilize the calcium channel in an inactivated state.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: CACNG6 (human) mapping to 19q13.4; *Cacng6* (mouse) mapping to 7 A1.

SOURCE

L-type Ca⁺⁺ CP γ 6 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of L-type Ca⁺⁺ CP γ 6 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-67458 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

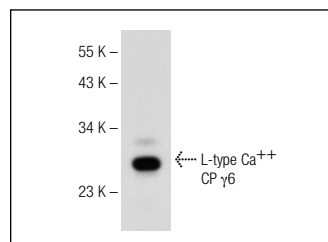
L-type Ca⁺⁺ CP γ 6 (N-13) is recommended for detection of L-type Ca⁺⁺ CP γ 6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for L-type Ca⁺⁺ CP γ 6 siRNA (h): sc-62050, L-type Ca⁺⁺ CP γ 6 siRNA (m): sc-62051, L-type Ca⁺⁺ CP γ 6 shRNA Plasmid (h): sc-62050-SH, L-type Ca⁺⁺ CP γ 6 shRNA Plasmid (m): sc-62051-SH, L-type Ca⁺⁺ CP γ 6 shRNA (h) Lentiviral Particles: sc-62050-V and L-type Ca⁺⁺ CP γ 6 shRNA (m) Lentiviral Particles: sc-62051-V.

Molecular Weight of L-type Ca⁺⁺ CP γ 6: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or A-10 cell lysate: sc-3806.

DATA



L-type Ca⁺⁺ CP γ 6 (N-13): sc-67458. Western blot analysis of L-type Ca⁺⁺ CP γ 6 expression in A-10 whole cell lysate.

STORAGE

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

PROTOCOLS

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