

L-type Ca^{++} CP $\gamma 3$ (h): 293T Lysate: sc-115545

BACKGROUND

Voltage-dependent calcium channels are important for the release of neurotransmitters into neurons. L-type (long lasting current) voltage-dependent calcium channels are composed of four subunits: an $\alpha 1$ subunit, a β subunit, a γ subunit and an $\alpha 2/\delta$ subunit. The γ subunit is made of eight distinct proteins (designated L-type Ca^{++} CP $\gamma 1$ - $\gamma 8$) and functions by influencing the properties of the calcium current. L-type Ca^{++} CP $\gamma 3$, also known as CACNG3 or Cacng2, is a 315 amino acid multi-pass membrane protein that belongs to the CACNG family. As one of the eight γ subunits, L-type Ca^{++} CP $\gamma 3$ is thought to stabilize the calcium current when the calcium channel is in a closed (inactivated) state. Defects in the gene encoding L-type Ca^{++} CP $\gamma 3$ may be associated with familial infantile convulsive disorder with paroxysmal choreoathetosis, an autosomal dominant neurological disorder.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CACNG3 (human) mapping to 16p12.1.

STORAGE

Store at -20°C . Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PRODUCT

L-type Ca^{++} CP $\gamma 3$ (h): 293T Lysate represents a lysate of human L-type Ca^{++} CP $\gamma 3$ transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

APPLICATIONS

L-type Ca^{++} CP $\gamma 3$ (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive L-type Ca^{++} CP $\gamma 3$ antibodies. Recommended use: 10-20 μl per lane.

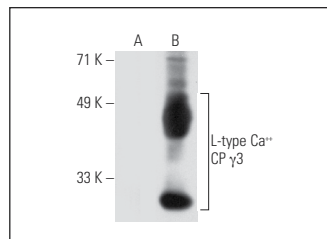
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

L-type Ca^{++} CP $\gamma 3$ (A-07): sc-81889 is recommended as a positive control antibody for Western Blot analysis of enhanced human L-type Ca^{++} CP $\gamma 3$ expression in L-type Ca^{++} CP $\gamma 3$ transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



L-type Ca^{++} CP $\gamma 3$ (A-07): sc-81889. Western blot analysis of L-type Ca^{++} CP $\gamma 3$ expression in non-transfected: sc-117752 (A) and human L-type Ca^{++} CP $\gamma 3$ transfected: sc-115545 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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