

T-type Ca⁺⁺ CP α1H (H-110): sc-28616

BACKGROUND

Voltage-dependent Ca²⁺ channels mediate Ca²⁺ entry into excitable cells in response to membrane depolarization, and they are involved in a variety of Ca²⁺-dependent processes, including muscle contraction, hormone or neurotransmitter release and gene expression. Calcium channels are highly diverse, multimeric complexes composed of an α-1 subunit, an intracellular β subunit, a disulfide linked α-2/δ subunit and a transmembrane γ subunit. Ca²⁺ currents are characterized on the basis of their biophysical and pharmacologic properties and include L-, N-, T-, P-, Q-, and R- types. T-type Ca²⁺ currents are activated and inactivated more rapidly and at more negative membrane potentials than other Ca²⁺ current types. T-type Ca²⁺ channels enhance odor sensitivity by lowering the threshold of spike generation in olfactory receptor cells (ORCs).

REFERENCES

1. Perez-Reyes, E. and Schneider, T. 1995. Molecular biology of calcium channels. *Kidney Int.* 48: 1111-1124.
2. Randall, A.D. 1998. The molecular basis of voltage-gated Ca²⁺ channel diversity: is it time for T. *J. Membr. Biol.* 161: 207-213.

CHROMOSOMAL LOCATION

Genetic locus: CACNA1H (human) mapping to 16p13.3; Cacna1h (mouse) mapping to 17 A3.3.

SOURCE

T-type Ca⁺⁺ CP α1H (H-110) is a rabbit polyclonal antibody raised against amino acids 2194-2303 mapping within a cytoplasmic domain of T-type Ca⁺⁺ CP α1H of human origin.

PRODUCT

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

APPLICATIONS

T-type Ca⁺⁺ CP α1H (H-110) is recommended for detection of T-type Ca⁺⁺ CP α1H of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 T-type Ca⁺⁺ CP α1H siRNA (h): sc-42706, T-type Ca⁺⁺ CP α1H siRNA (m): sc-42707, T-type Ca⁺⁺ CP α1H shRNA Plasmid (h): sc-42706-SH, T-type Ca⁺⁺ CP α1H shRNA Plasmid (m): sc-42707-SH, T-type Ca⁺⁺ CP α1H shRNA (h) Lentiviral Particles: sc-42706-V and T-type Ca⁺⁺ CP α1H shRNA (m) Lentiviral Particles: sc-42707-V.

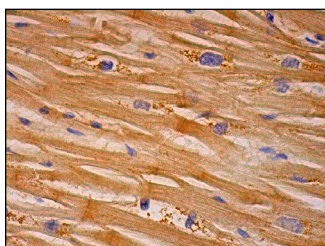
Molecular Weight (predicted) of T-type Ca⁺⁺ CP α1H: 259 kDa.

Molecular Weight (observed) of T-type Ca⁺⁺ CP α1H: 257 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



T-type Ca⁺⁺ CP α1H (H-110): sc-28616. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

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.


 MONOS
Satisfaction
Guaranteed

Try **T-type Ca⁺⁺ CP α1H (G-10): sc-377510**, our highly recommended monoclonal alternative to T-type Ca⁺⁺ CP α1H (H-110).