SANTA CRUZ BIOTECHNOLOGY, INC.

LGICZ1 (T-15): sc-168428

BACKGROUND

LGICZ1 (ligand-gated ion channel zinc-activated 1), also known as ZACN (zinc-activated ligand-gated ion channel), L2, LGICZ or ZAC, is a 412 amino acid multi-pass membrane protein belonging to the ligand-gated ion channel family. LGICZ1 forms a cation-permeable ligand-gated ion channel of the "Cys-loop" superfamily and is glycosylated during post-translational modification. The endogenous ligand for LGICZ1 is Zn^{2+}, although LGICZ1 has also been found to activate spontaneously. LGICZ1 is detected in pancreas, brain, liver, placenta, trachea, kidney, spinal cord, stomach and fetal brain. In the adult brain region, LGICZ1 is detected in the hippocampus, striatum, amygdala and thalamus. Mouse and rat orthologous proteins of LGICZ1 do not exist. Three isoforms of LGICZ1 are produced by alternative splicing events.

REFERENCES

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3. Connolly, C.N., et al. 2004. The Cys-loop superfamily of ligand-gated ion channels: the impact of receptor structure on function. Biochem. Soc. Trans. 32: 529-534.

4. Houtani, T., et al. 2005. Cloning and expression of ligand-gated ion-channel receptor L2 in central nervous system. Biochem. Biophys. Res. Commun. 335: 277-285.

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CHROMOSOMAL LOCATION

Genetic locus: ZACN (human) mapping to 17q25.1.

SOURCE

LGICZ1 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of LGICZ1 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.

Blocking peptide available for competition studies, sc-168428 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

LGICZ1 (T-15) is recommended for detection of LGICZ1 of human 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).

Suitable for use as control antibody for LGICZ1 siRNA (h): sc-93908, LGICZ1 shRNA Plasmid (h): sc-93908-SH and LGICZ1 shRNA (h) Lentiviral Particles: sc-93908-V.

Molecular Weight of LGICZ1 isoform 1: 46 kDa.

Molecular Weight of LGICZ1 isoform 2: 30 kDa.

Molecular Weight of LGICZ1 isoform 3: 13 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.

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.