CTXL (T-14): sc-240265



The Power to Question

BACKGROUND

CTXL, also known as CTH (cortical thymocyte-like protein) or VSIG2 (V-set and immunoglobulin domain-containing protein 2), is a 327 amino acid single-pass type-I membrane protein that exists as 2 alternatively spliced isoforms, and contains one Ig-like C2-type (immunoglobulin-like) domain and one Ig-like V-type (immunoglobulin-like) domain. While highly expressed in stomach, colon, prostate, trachea and thyroid glands, CTXL is weakly expressed in bladder and lung. The gene that encodes CTXL consists of approximately 4,767 bases and maps to human chromosome 11q24.2. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that map to chromosome 11.

REFERENCES

- Chretien, I., Marcuz, A., Courtet, M., Katevuo, K., Vainio, O., Heath, J.K., White, S.J. and Du Pasquier, L. 1998. CTX, a *Xenopus* thymocyte receptor, defines a molecular family conserved throughout vertebrates. Eur. J. Immunol. 28: 4094-4104.
- Fabiani, J.E., Avigliano, A., Dupont, J.C. and Fabiana, J.E. 2000. Hereditary angioedema. Long-term follow-up of 88 patients. Experience of the Argentine Allergy and Immunology Institute. Allergol. Immunopathol. 28: 267-271.
- Jira, P.E., Waterham, H.R., Wanders, R.J., Smeitink, J.A., Sengers, R.C. and Wevers, R.A. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. Ann. Hum. Genet. 67: 269-280.
- Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. J. Inherit. Metab. Dis. 30: 654-663.
- Siem, G., Früh, A., Leren, T.P., Heimdal, K., Teig, E. and Harris, S. 2008.
 Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. Ear Hear. 29: 261-269.
- Bhuiyan, Z.A., Momenah, T.S., Amin, A.S., Al-Khadra, A.S., Alders, M., Wilde, A.A. and Mannens, M.M. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-Nielsen syndrome. Prog. Biophys. Mol. Biol. 98: 319-327.
- Coldren, C.D., Lai, Z., Shragg, P., Rossi, E., Glidewell, S.C., Zuffardi, O., Mattina, T., Ivy, D.D., Curfs, L.M., Mattson, S.N., Riley, E.P., Treier, M. and Grossfeld, P.D. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). Neurogenetics 10: 89-95.

CHROMOSOMAL LOCATION

Genetic locus: VSIG2 (human) mapping to 11q24.2; Vsig2 (mouse) mapping to 9 A4.

SOURCE

CTXL (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CTXL of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-240265 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTXL (T-14) is recommended for detection of CTXL of mouse, rat and 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).

CTXL (T-14) is also recommended for detection of CTXL in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CTXL siRNA (h): sc-72076, CTXL siRNA (m): sc-142632, CTXL shRNA Plasmid (h): sc-72076-SH, CTXL shRNA Plasmid (m): sc-142632-SH, CTXL shRNA (h) Lentiviral Particles: sc-72076-V and CTXL shRNA (m) Lentiviral Particles: sc-142632-V.

Molecular Weight of CTXL isoforms: 34/30 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.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**