SANTA CRUZ BIOTECHNOLOGY, INC.

CTRP4 (K-18): sc-79217



BACKGROUND

Members of the CTRP (complement C1q tumor necrosis factor-related protein) family are structurally related, although functionally diverse. CTRPs share TNF α -like globular domains and N-terminal glycine-X-Y repeats and also tend to form trimers that have the ability to congregate into higher order structures. CTRP4, also known as C10TNF4 (C1q and tumor necrosis factor related protein 4) or ZACRP4, is a 329 amino acid secreted protein that contains two C1q domains and may play a role in immune homeostasis and various other events throughout the cell. The gene encoding CTRP4 maps to human chromosome 11, which 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 maps to chromosome 11.

REFERENCES

- Polyak, K., Xia, Y., Zweier, J.L., Kinzler, K.W. and Vogelstein, B. 1997. A model for p53-induced apoptosis. Nature 389: 300-305.
- Katoh, M. and Katoh, M. 2004. Identification and characterization of human TP53I5 and mouse Tp53i5 genes in silico. Int. J. Oncol. 25: 225-230.
- Grossfeld, P.D., Mattina, T., Lai, Z., Favier, R., Jones, K.L., Cotter, F. and Jones, C. 2004. The 11q terminal deletion disorder: a prospective study of 110 cases. Am. J. Med. Genet. A 129: 51-61.
- Loussouarn, G., Baró, I. and Escande, D. 2006. KCNQ1 K⁺ channel-mediated cardiac channelopathies. Methods Mol. Biol. 337: 167-183.
- Taylor, T.D., Noguchi, H., Totoki, Y., Toyoda, A., Kuroki, Y., Dewar, K., Lloyd, C., Itoh, T., Takeda, T., Kim, D.W., She, X., Barlow, K.F., Bloom, T., Bruford, E., Chang, J.L., Cuomo, C.A., Eichler, E., Fitzgerald, M.G., Jaffe, D.B., LaButti, K., Nicol, R., Park, H.S., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. Nature 440: 497-500.
- Zehelein, J., Kathoefer, S., Khalil, M., Alter, M., Thomas, D., Brockmeier, K., Ulmer, H.E., Katus, H.A. and Koenen, M. 2006. Skipping of Exon 1 in the KCNQ1 gene causes Jervell and Lange-Nielsen syndrome. J. Biol. Chem. 281: 35397-35403.

CHROMOSOMAL LOCATION

Genetic locus: C1QTNF4 (human) mapping to 11p11.2; C1qtnf4 (mouse) mapping to 2 E1.

SOURCE

CTRP4 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CTRP4 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-79217 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTRP4 (K-18) is recommended for detection of CTRP4 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).

CTRP4 (K-18) is also recommended for detection of CTRP4 in additional species, including canine and porcine.

Suitable for use as control antibody for CTRP4 siRNA (h): sc-77051, CTRP4 shRNA Plasmid (h): sc-77051-SH and CTRP4 shRNA (h) Lentiviral Particles: sc-77051-V.

Molecular Weight of CTRP4: 35 kDa.

Positive Controls: CTRP4 (m2): 293 Lysate: sc-178458.

DATA

	A B
90 K –	
55 K –	
43 K –	
34 K –	CTRP4
23 K –	

CTRP4 (K-18): sc-79217. Western blot analysis of CTRP4 expression in non-transfected: sc-110760 (**A**) and mouse CTRP4 transfected: sc-178458 (**B**) 293 whole cell lysates.

STORAGE

Store at 4° C, **D0 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 Try Satisfation mon Guaranteed

Try **CTRP4 (C-4): sc-514719**, our highly recommended monoclonal alternative to CTRP4 (K-18).