CTRP4 (m2): 293 Lysate: sc-178458



The Power to Question

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 C1QTNF4 (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.
- 2. Katoh, M. and Katoh, M. 2004. Identification and characterization of human TP53I5 and mouse Tp53I5 genes in silico. Int. J. Oncol. 25: 225-230.
- 3. 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 129A: 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., 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.
- 7. Ataga, K.I., Cappellini, M.D. and Rachmilewitz, E.A. 2007. β-thalassaemia and sickle cell anaemia as paradigms of hypercoagulability. Br. J. Haematol. 139: 3-13.
- 8. Berger, A.C., Salazar, G., Styers, M.L., Newell-Litwa, K.A., Werner, E., Maue, R.A., Corbett, A.H. and Faundez, V. 2007. The subcellular localization of the Niemann-Pick type C proteins depends on the adaptor complex AP-3. J. Cell Sci. 120: 3640-3652.
- 9. Wong, G.W., Krawczyk, S.A., Kitidis-Mitrokostas, C., Revett, T., Gimeno, R. and Lodish, H.F. 2008. Molecular, biochemical and functional characterizations of C1q/TNF family members: adipose-tissue-selective expression patterns, regulation by PPAR-γ agonist, cysteine-mediated oligomerizations, combinatorial associations and metabolic functions. Biochem. J. 416: 161-177.

CHROMOSOMAL LOCATION

Genetic locus: C1qtnf4 (mouse) mapping to 2 E1.

PRODUCT

CTRP4 (m2): 293 Lysate represents a lysate of mouse CTRP4 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CTRP4 (m2): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive CTRP4 antibodies. Recommended use: 10-20 µl per lane.

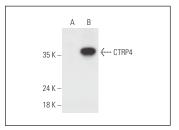
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

CTRP4 (C-4): sc-514719 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse CTRP4 expression in CTRP4 transfected 293 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-lgG κ BP-HRP: sc-516102 or m-lgG 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



CTRP4 (C-4): sc-514719. Western blot analysis of CTRP4 expression in non-transfected: sc-110760 (A) and mouse CTRP4 transfected: sc-178458 (B) 293 whole cell lyeates

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.

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.