# SANTA CRUZ BIOTECHNOLOGY, INC.

# CTRP2 (B-3): sc-390778



# BACKGROUND

CTRP2, also known as C1QTNF2 (C1q and tumor necrosis factor related protein 2) or zacrp2, is a 285 amino acid secreted protein that contains one C1q domain and one collagen-like domain and is encoded by a gene that maps to human chromosome 5. Chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

#### **REFERENCES**

- 1. Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
- Saltman, D.L., et al. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. Genomics 16: 726-732.
- Law, S.F., et al. 1998. Cell cycle-regulated processing of HEF1 to multiple protein forms differentially targeted to multiple subcellular compartments. Mol. Cell. Biol. 18: 3540-3551.
- 4. South, S.T., et al. 2006. A new genomic mechanism leading to cri-du-chat syndrome. Am. J. Med. Genet. A 140A: 2714-2720.
- Du, H.Y., et al. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p- syndrome. Aging Cell 6: 689-697.

#### **CHROMOSOMAL LOCATION**

Genetic locus: C1QTNF2 (human) mapping to 5q33.3; C1qtnf2 (mouse) mapping to 11 B1.1.

# SOURCE

CTRP2 (B-3) is a mouse monoclonal antibody raised against amino acids 94-182 mapping within an internal region of CTRP2 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g \; lgG_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CTRP2 (B-3) is available conjugated to agarose (sc-390778 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390778 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390778 PE), fluorescein (sc-390778 FITC), Alexa Fluor<sup>®</sup> 488 (sc-390778 AF488), Alexa Fluor<sup>®</sup> 546 (sc-390778 AF546), Alexa Fluor<sup>®</sup> 594 (sc-390778 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-390778 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-390778 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-390778 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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# **APPLICATIONS**

CTRP2 (B-3) is recommended for detection of CTRP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

CTRP2 (B-3) is also recommended for detection of CTRP2 in additional species, including equine and canine.

Suitable for use as control antibody for CTRP2 siRNA (h): sc-77049, CTRP2 siRNA (m): sc-77050, CTRP2 siRNA (r): sc-270443, CTRP2 shRNA Plasmid (h): sc-77049-SH, CTRP2 shRNA Plasmid (m): sc-77050-SH, CTRP2 shRNA Plasmid (r): sc-270443-SH, CTRP2 shRNA (h) Lentiviral Particles: sc-77049-V, CTRP2 shRNA (m) Lentiviral Particles: sc-77050-V and CTRP2 shRNA (r) Lentiviral Particles: sc-270443-V.

Molecular Weight of CTRP2: 30 kDa.

Positive Controls: CTRP2 (h): 293T Lysate: sc-116312.

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

# DATA



CTRP2 (B-3): sc-390778. Western blot analysis of CTRP2 expression in non-transfected: sc-117752 (**A**) and human CTRP2 transfected: sc-116312 (**B**) 293T whole cell lysates.

#### **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.