SANTA CRUZ BIOTECHNOLOGY, INC.

C10orf47 (E-14): sc-138752



BACKGROUND

C10orf47 (chromosome 10 open reading frame 47) is a 435 amino acid protein that exists as 2 alternatively spliced isoforms that are encoded by a gene located on human chromosome 10. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

- Jabs, E.W., et al. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. Nat. Genet. 8: 275-279.
- 2. Deloukas, P., et al. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. Cytogenet. Cell Genet. 90: 1-12.
- 3. Gilbert, F. 2001. Chromosome 10. Genet. Test. 5: 69-82.
- Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
- Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. Am. J. Hum. Genet. 81: 756-767.
- Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. Am. J. Surg. Pathol. 32: 1258-1264.
- 7. Yin, Y., et al. 2008. PTEN: a new guardian of the genome. Oncogene 27: 5443-5453.

CHROMOSOMAL LOCATION

Genetic locus: C10orf47 (human) mapping to 10p14; 5430407P10Rik (mouse) mapping to 2 A1.

SOURCE

C10orf47 (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of C10orf47 of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138752 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

C10orf47 (E-14) is recommended for detection of C10orf47 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other C10orf family members.

Suitable for use as control antibody for C10orf47 siRNA (h): sc-90470, C10orf47 siRNA (m): sc-141817, C10orf47 shRNA Plasmid (h): sc-90470-SH, C10orf47 shRNA Plasmid (m): sc-141817-SH, C10orf47 shRNA (h) Lentiviral Particles: sc-90470-V and C10orf47 shRNA (m) Lentiviral Particles: sc-141817-V.

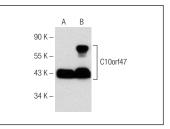
Molecular Weight of C10orf47: 46 kDa.

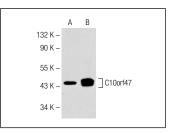
Positive Controls: C10orf47 (h): 293T Lysate: sc-116056 or mouse prostate tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA





C10orf47 (E-14): sc-138752. Western blot analysis of C10orf47 expression in non-transfected: sc-117752 (**A**) and human C10orf47 transfected: sc-116056 (**B**) 293T whole cell lysates.

C10orf47 (E-14): sc-138752. Western blot analysis of C10orf47 expression in 293T whole cell lysate (A) and mouse prostate tissue extract (B).

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try C10orf47 (G-11): sc-514063 or C10orf47 (E-7): sc-398975, our highly recommended monoclonal alternatives to C10orf47 (E-14).