SANTA CRUZ BIOTECHNOLOGY, INC.

C10orf47 (S-12): sc-138753



The Power to Question

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

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- 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.
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CHROMOSOMAL LOCATION

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

SOURCE

C10orf47 (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of C10orf47 of human origin.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

PRODUCT

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

Blocking peptide available for competition studies, sc-138753 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C10orf47 (S-12) 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 μ g per 100-500 μ g 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.

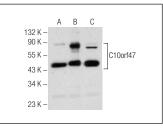
Molecular Weight of C10orf47: 46 kDa.

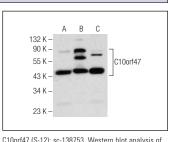
Positive Controls: C10orf47 (h): 293T Lysate: sc-116056, C10orf47 (m): 293T Lysate: sc-126528 or mouse prostate tissue extract.

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 expression in non-transfected: sc-117752 (A)

and mouse C10orf47 transfected: sc-126528 (B) 2931

whole cell lysates and mouse prostate tissue extract (C)

C10orf47 (S-12): sc-138753. Western blot analysis of C10orf47 expression in non-transfected: sc-117752 (A) and human C10orf47 transfected: sc-116056 (B) 293T whole cell lysates and mouse prostate tissue extract (C)

RESEARCH USE

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