

TCEANC2 (C-16): sc-240117

BACKGROUND

TCEANC2 (transcription elongation factor A N-terminal and central domain-containing protein 2), also known as C1orf83, is a 208 amino acid nuclear protein that exists as 2 alternatively spliced isoforms. The gene encoding TCEANC2 maps to human chromosome 1, which is the largest chromosome spanning about 260 million base pairs and makes up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma. The C1orf83 gene product has been provisionally designated C1orf83 pending further characterization.

REFERENCES

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4. Lans, H. and Hoeijmakers, J.H. 2006. Cell biology: aging nucleus gets out of shape. *Nature* 440: 32-34.
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6. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC1 in major mental illness. *Schizophr. Bull.* 32: 409-416.
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CHROMOSOMAL LOCATION

Genetic locus: TCEANC2 (human) mapping to 1p32.3; Tceanc2 (mouse) mapping to 4 C7.

SOURCE

TCEANC2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TCEANC2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-240117 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TCEANC2 (C-16) is recommended for detection of TCEANC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

TCEANC2 (C-16) is also recommended for detection of TCEANC2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for TCEANC2 siRNA (h): sc-88814, TCEANC2 siRNA (m): sc-108618, TCEANC2 shRNA Plasmid (h): sc-88814-SH, TCEANC2 shRNA Plasmid (m): sc-108618-SH, TCEANC2 shRNA (h) Lentiviral Particles: sc-88814-V and TCEANC2 shRNA (m) Lentiviral Particles: sc-108618-V.

Molecular Weight of TCEANC2: 30 kDa.

Positive Controls: human fetal heart tissue extract or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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