SANTA CRUZ BIOTECHNOLOGY, INC.

TDE2L (E-18): sc-138678

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TDE2L (tumor differentially expressed protein 2-like), also known as SERINC2 (serine incorporator 2), is a 456 amino acid multi-pass membrane protein that belongs to the TDE1 family. The gene that encodes TDE2L contains more than 25,000 bases and maps to human chromosome 1p35.2. With roughly 3,000 genes that span about 260 million base pairs, chromosome 1 makes up 8% of the human genome. There is also a large number of diseases associated with chromosome 1, notably, the rare aging disease Hutchinson-Gilford progeria, which is associated with the LMNA gene that 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.

REFERENCES

1. Eudy, J.D., et al. 1998. Isolation of a gene encoding a novel member of the nuclear receptor superfamily from the critical region of Usher syndrome type IIa at 1q41. Genomics 50: 382-384.
2. Bowling, E.L., et al. 2000. The Stickler syndrome: case reports and literature review. Optometry 71: 177-182.
3. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.
4. Player, A., et al. 2003. Identification of TDE2 gene and its expression in non-small cell lung cancer. Int. J. Cancer 107: 238-243.
5. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
6. Oliveira, S.A., et al. 2005. Identification of risk and age-at-onset genes on chromosome 1p in Parkinson disease. Am. J. Hum. Genet. 77: 252-264.

CHROMOSOMAL LOCATION

Genetic locus: SERINC2 (human) mapping to 1p35.2.

SOURCE

TDE2L (E-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of TDE2L 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-138678 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TDE2L (E-18) is recommended for detection of TDE2L of 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 TDE1.

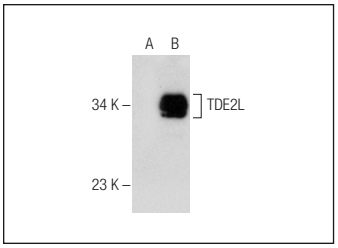
Suitable for use as control antibody for TDE2L siRNA (h): sc-88739, TDE2L shRNA Plasmid (h): sc-88739-SH and TDE2L shRNA (h) Lentiviral Particles: sc-88739-V.

Molecular Weight of TDE2L: 51 kDa.

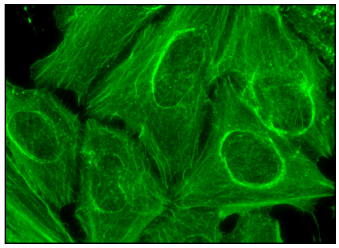
RECOMMENDED SECONDARY REAGENTS

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



TDE2L (E-18): sc-138678. Western blot analysis of TDE2L expression in non-transfected: sc-117752 (**A**) and mouse TDE2L transfected: sc-126084 (**B**) 293T whole cell lysates.



TDE2L (E-18): sc-138678. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

1. Nguyen, L.S., et al. 2013. Contribution of copy number variants involving nonsense-mediated mRNA decay pathway genes to neuro-developmental disorders. Hum. Mol. Genet. 22: 1816-1825.

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.