SANTA CRUZ BIOTECHNOLOGY, INC.

Treslin (N-19): sc-245353

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The Power to Question

BACKGROUND

Treslin, also known as TICRR (topBP1-interacting checkpoint and replication regulator), SLD3 or C15orf42, is a 1,910 amino acid nuclear protein that belongs to the Treslin family. Treslin is involved in the initiation and regulation of DNA replication via interactions with TopBP1 and the Cdk2-mediated packaging of Cdc45 onto replication origins. Treslin is required for the pre-replication complex (pre-RC) transition to pre-initiation complex (pre-IC), and for the prevention of mitotic entry after treatment with ionizing radiation. Existing as two alternatively spliced isoforms, Treslin is encoded by a gene that maps to human chromosome 15q26.1 and mouse chromosome 7 D3.

REFERENCES

1. Gauci, S., et al. 2009. Lys-N and trypsin cover complementary parts of the phosphoproteome in a refined SCX-based approach. Anal. Chem. 81: 4493-4501.
2. Mayya, V., et al. 2009. Quantitative phosphoproteomic analysis of T cell receptor signaling reveals system-wide modulation of protein-protein interactions. Sci. Signal. 2: ra46.
3. Kumagai, A., et al. 2010. Treslin collaborates with TopBP1 in triggering the initiation of DNA replication. Cell 140: 349-359.
4. Sansam, C.L., et al. 2010. A vertebrate gene, ticrr, is an essential checkpoint and replication regulator. Genes Dev. 24: 183-194.
5. Zegerman, P., et al. 2010. Checkpoint-dependent inhibition of DNA replication initiation by Sld3 and Dbf4 phosphorylation. Nature 467: 474-478.
6. Lopez-Mosqueda, J., et al. 2010. Damage-induced phosphorylation of Sld3 is important to block late origin firing. Nature 467: 479-483.
7. Wang, Z., et al. 2012. Treslin, DUE-B, and GEMC1 cannot complement Sld3 mutants in fission yeast. FEMS Yeast Res. 12: 486-490.

CHROMOSOMAL LOCATION

Genetic locus: TICRR (human) mapping to 15q26.1; Ticrr (mouse) mapping to 7 D3.

SOURCE

Treslin (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Treslin 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-245353 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

Treslin (N-19) is recommended for detection of Treslin 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).

Treslin (N-19) is also recommended for detection of Treslin in additional species, including canine and bovine.

Suitable for use as control antibody for Treslin siRNA (h): sc-90086, Treslin siRNA (m): sc-140395, Treslin shRNA Plasmid (h): sc-90086-SH, Treslin shRNA Plasmid (m): sc-140395-SH, Treslin shRNA (h) Lentiviral Particles: sc-90086-V and Treslin shRNA (m) Lentiviral Particles: sc-140395-V.

Molecular Weight of Treslin: 211 kDa.

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.

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.