SANTA CRUZ BIOTECHNOLOGY, INC.

THOC3 (N-20): sc-66671

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. THOC3 (THO complex subunit 3), also known as TEX1, is a 351 amino acid protein that localized to the nucleus and contains 6 WD repeats. Existing as a component of the heteromultimeric THO/TREX (transcription/export) complex, THOC3 plays a role in the coupling of Pol II elongation with RNA splicing and export factors, thereby participating in transcription and RNA export.

REFERENCES

1. van der Voorn, L. and Ploegh, H.L. 1992. The WD-40 repeat. FEBS Lett. 307: 131-134.
2. Neer, E.J., et al. 1994. The ancient regulatory-protein family of WD-repeat proteins. Nature 371: 297-300.
3. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
4. Strässer, K., et al. 2002. TREX is a conserved complex coupling transcription with messenger RNA export. Nature 417: 304-308.

CHROMOSOMAL LOCATION

Genetic locus: THOC3 (human) mapping to 5q35.2; Thoc3 (mouse) mapping to 13 B1.

SOURCE

THOC3 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of THOC3 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-66671 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-66671 X, 200 µg/0.1 ml.

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.

APPLICATIONS

THOC3 (N-20) is recommended for detection of THOC3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

THOC3 (N-20) is also recommended for detection of THOC3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for THOC3 siRNA (h): sc-63125, THOC3 siRNA (m): sc-63126, THOC3 shRNA Plasmid (h): sc-63125-SH, THOC3 shRNA Plasmid (m): sc-63126-SH, THOC3 shRNA (h) Lentiviral Particles: sc-63125-V and THOC3 shRNA (m) Lentiviral Particles: sc-63126-V.

THOC3 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

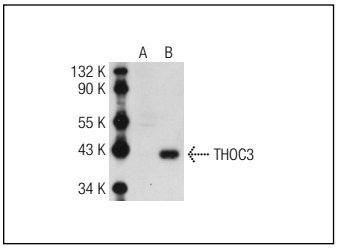
Molecular Weight of THOC3: 39 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or THOC3 (h): 293 Lysate: sc-110698.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



THOC3 (N-20): sc-66671. Western blot analysis of THOC3 expression in non-transfected: sc-110760 (**A**) and human THOC3 transfected: sc-110698 (**B**) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Lopitz-Otsoa, F., et al. 2012. Integrative analysis of the ubiquitin proteome isolated using tandem ubiquitin binding entities (TUBEs). J. Proteomics 75: 2998-3014.