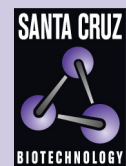


THOC6 (I-18): sc-69037



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. THOC6 (THO complex 6 homolog), also known as WDR58 (WD-repeat-containing protein 58) is a 341 amino acid protein that contains 7 WD-repeats and belongs to the WD-repeat THOC6 family. THOC6 is a component of the THO/TREX complex that is recruited to transcribed genes and travels along with RNA polymerase II (Pol II) during elongation, coupling elongating Pol II with RNA splicing and export factors. Multiple isoforms of THOC6 exist due to alternative splicing events.

REFERENCES

1. van der Voorn, L. and Ploegh, H.L. 1992. The WD-40 repeat. *FEBS Lett.* 307: 131-134.
2. Neer, E.J., Schmidt, C.J., Nambudripad, R. and Smith, T.F. 1994. The ancient regulatory-protein family of WD-repeat proteins. *Nature* 371: 297-300.
3. Garcia-Higuera, I., Fenoglio, J., Li, Y., Lewis, C., Panchenko, M.P., Reiner, O., Smith, T.F. and Neer, E.J. 1996. Folding of proteins with WD-repeats: comparison of six members of the WD-repeat superfamily to the G protein β subunit. *Biochemistry* 35: 13985-13994.
4. Garcia-Higuera, I., Gaitatzes, C., Smith, T.F. and Neer, E.J. 1998. Folding a WD repeat propeller. Role of highly conserved aspartic acid residues in the G protein β subunit and Sec13. *J. Biol. Chem.* 273: 9041-9049.
5. Smith, T.F., Gaitatzes, C., Saxena, K. and Neer, E.J. 1999. The WD repeat: a common architecture for diverse functions. *Trends Biochem. Sci.* 24: 181-185.
6. Li, D. and Roberts, R. 2001. WD-repeat proteins: structure characteristics, biological function, and their involvement in human diseases. *Cell. Mol. Life Sci.* 58: 2085-2097.

CHROMOSOMAL LOCATION

Genetic locus: THOC6 (human) mapping to 16p13.3; Thoc6 (mouse) mapping to 17 A3.3.

SOURCE

THOC6 (I-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of THOC6 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-69037 P, (100 μ g 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-69037 X, 200 μ g/0.1 ml.

APPLICATIONS

THOC6 (I-18) is recommended for detection of THOC6 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).

THOC6 (I-18) is also recommended for detection of THOC6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for THOC6 siRNA (h): sc-76656, THOC6 siRNA (m): sc-76657, THOC6 shRNA Plasmid (h): sc-76656-SH, THOC6 shRNA Plasmid (m): sc-76657-SH, THOC6 shRNA (h) Lentiviral Particles: sc-76656-V and THOC6 shRNA (m) Lentiviral Particles: sc-76657-V.

THOC6 (I-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

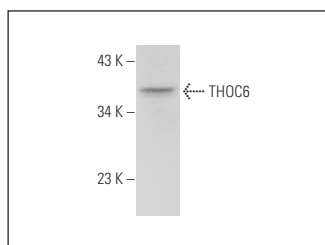
Molecular Weight of THOC6: 38 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 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.

DATA



THOC6 (I-18): sc-69037. Western blot analysis of THOC6 expression in HeLa whole cell lysate.

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.