

# TTC1 (C-15): sc-160879

## BACKGROUND

The tetratricopeptide repeat (TPR) motif is a degenerate, 34 amino acid sequence found in many proteins and acts to mediate protein-protein interactions in various pathways. At the sequence level, there can be up to 16 tandem TPR repeats, each of which has a helix-turn-helix shape that stacks on other TPR repeats to achieve ligand binding specificity. TTC1 (tetratricopeptide repeat domain 1), also known as TPR1, is a 292 amino acid protein containing three TPR repeats. Considered a chaperone adaptor, TTC1 regulates HSP 70-dependent folding processes by interacting with the C-terminal domain of HSP 70. TTC1 also interacts with Ras and a few G $\alpha$  proteins, suggesting a function in protein-protein interaction relating to G-protein signaling. The gene encoding TTC1 is located on human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TTC1 (human) mapping to 5q33.3; Ttc1 (mouse) mapping to 11 B1.1.

## SOURCE

TTC1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TTC1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-160879 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TTC1 (C-15) is recommended for detection of TTC1 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); non cross-reactive with other TTC family members.

TTC1 (C-15) is also recommended for detection of TTC1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TTC1 siRNA (h): sc-91620, TTC1 siRNA (m): sc-154749, TTC1 shRNA Plasmid (h): sc-91620-SH, TTC1 shRNA Plasmid (m): sc-154749-SH, TTC1 shRNA (h) Lentiviral Particles: sc-91620-V and TTC1 shRNA (m) Lentiviral Particles: sc-154749-V.

Molecular Weight of TTC1: 34 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.