

# TTI1 (N-19): sc-85605

## BACKGROUND

TTI1 (TELO2-interacting protein 1 homolog), also known as SMG10, is a 1,089 amino acid protein that is widely expressed and belongs to the TTI1 family. TTI1 functions as a regulator of the DNA damage response (DDR) and is a component of the TTT complex, which is necessary for the stabilization of protein levels of the phosphatidylinositol 3-kinase (PIKK) family. The TTT complex is a part of the cellular resistance to DNA damage stresses such as ionizing radiation (IR), ultraviolet (UV) and mitomycin C (MMC). In combination with the TTT complex and HSP90, TTI1 may play a role in the proper folding of newly synthesized PIKKs. TTI1 also is involved in the assembly of mTORC1 and mTORC2 complexes, as well as their stabilization and maintenance. TTI1 is post-translationally modified at serine 459 and the gene encoding this protein maps to human chromosome 20.

## CHROMOSOMAL LOCATION

Genetic locus: TTI1 (human) mapping to 20q11.23; Tti1 (mouse) mapping to 2 H1.

## SOURCE

TTI1 (N-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of TTI1 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-85605 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

TTI1 (N-19) is recommended for detection of TTI1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TTI1 (N-19) is also recommended for detection of TTI1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TTI1 siRNA (h): sc-75381, TTI1 siRNA (m): sc-146444, TTI1 shRNA Plasmid (h): sc-75381-SH, TTI1 shRNA Plasmid (m): sc-146444-SH, TTI1 shRNA (h) Lentiviral Particles: sc-75381-V and TTI1 shRNA (m) Lentiviral Particles: sc-146444-V.

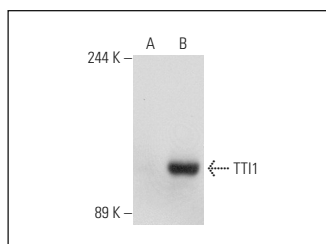
Molecular Weight of TTI1: 122 kDa.

Positive Controls: TTI1 (h2): 293 Lysate: sc-113814, HeLa whole cell lysate: sc-2200 or SK-N-MC cell lysate: sc-2237.

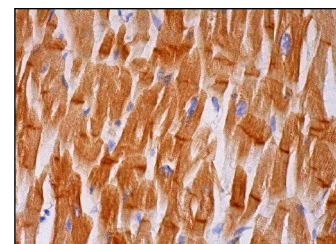
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



TTI1 (N-19): sc-85605. Western blot analysis of TTI1 expression in non-transfected: sc-110760 (A) and human TTI1 transfected: sc-113814 (B) 293 whole cell lysates.



TTI1 (N-19): sc-85605. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic and intercalated disc staining of myocytes.

## 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.



Try **TTI1 (B-1): sc-365119** or **TTI1 (F-6): sc-271851**, our highly recommended monoclonal alternatives to TTI1 (N-19).