TTC17 (Q-18): sc-244520



The Power to Question

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. TTC17 (tetratricopeptide repeat protein 17) is a 1,141 amino acid protein belonging to the TPR family. Containing 6 TPR repeats, TTC17 is encoded by a gene located in a region of human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that map to chromosome 11p12.

REFERENCES

- Blatch, G.L. and Lassle, M. 1999. The tetratricopeptide repeat: a structural motif mediating protein-protein interactions. Bioessays 21: 932-939.
- 2. Andrade, M.A., Perez-Iratxeta, C. and Ponting, C.P. 2001. Protein repeats: structures, functions, and evolution. J. Struct. Biol. 134: 117-131.
- Smith, D.F. 2004. Tetratricopeptide repeat cochaperones in steroid receptor complexes. Cell Stress Chaperones 9: 109-121.
- Banerjee, A., Periyasamy, S., Wolf, I.M., Hinds, T.D., Yong, W., Shou, W. and Sanchez, E.R. 2008. Control of glucocorticoid and progesterone receptor subcellular localization by the ligand-binding domain is mediated by distinct interactions with tetratricopeptide repeat proteins. Biochemistry 47: 10471-10480.
- Wilson, J.B., Blom, E., Cunningham, R., Xiao, Y., Kupfer, G.M. and Jones, N.J. 2010. Several tetratricopeptide repeat (TPR) motifs of FANCG are required for assembly of the BRCA2/D1-D2-G-X3 complex, FANCD2 monoubiquitylation and phleomycin resistance. Mutat. Res. 689: 12-20.
- Schülke, J.P., Wochnik, G.M., Lang-Rollin, I., Gassen, N.C., Knapp, R.T., Berning, B., Yassouridis, A. and Rein, T. 2010. Differential impact of tetratricopeptide repeat proteins on the steroid hormone receptors. PLoS ONE 5: e11717.

CHROMOSOMAL LOCATION

Genetic locus: TTC17 (human) mapping to 11p12; Ttc17 (mouse) mapping to 2 $\rm E1$.

SOURCE

TTC17 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TTC17 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244520 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TTC17 (Q-18) is recommended for detection of TTC17 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); non cross-reactive with other TTC family members.

TTC17 (Q-18) is also recommended for detection of TTC17 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TTC17 siRNA (h): sc-97034, TTC17 siRNA (m): sc-154755, TTC17 shRNA Plasmid (h): sc-97034-SH, TTC17 shRNA Plasmid (m): sc-154755-SH, TTC17 shRNA (h) Lentiviral Particles: sc-97034-V and TTC17 shRNA (m) Lentiviral Particles: sc-154755-V.

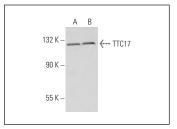
Molecular Weight of TTC17: 130 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136 or Hep G2 cell lysate: sc-2227.

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



TTC17 (Q-18): sc-244520. Western blot analysis of TTC17 expression in HEK293 (**A**) and Hep G2 (**B**) whole cell lysates.

STORAGES

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.

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