

# TTC25 (B-9): sc-376533

## BACKGROUND

TTC25 (tetratricopeptide repeat protein 25) is a 672 amino acid protein that contains eight TPR repeats and exists as two alternatively spliced isoforms. The gene that encodes TTC25 consists of approximately 30,782 bases and maps to human chromosome 17q21.2. Encoding more than 1,200 genes, chromosome 17 comprises over 2.5% of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of ovary, colon, prostate gland and fallopian tubes.

## REFERENCES

- Hall, J.M., et al. 1992. Closing in on a breast cancer gene on chromosome 17q. *Am. J. Hum. Genet.* 50: 1235-1242.
- Evans, S.C., et al. 1997. The Li-Fraumeni syndrome: an inherited susceptibility to cancer. *Mol. Med. Today* 3: 390-395.
- Varley, J.M., et al. 1997. A detailed study of loss of heterozygosity on chromosome 17 in tumours from Li-Fraumeni patients carrying a mutation to the TP53 gene. *Oncogene* 14: 865-871.
- Kersemaekers, A.M., et al. 1998. Loss of heterozygosity for defined regions on chromosomes 3, 11 and 17 in carcinomas of the uterine cervix. *Br. J. Cancer* 77: 192-200.
- Soussi, T., et al. 2000. p53 website and analysis of p53 gene mutations in human cancer: forging a link between epidemiology and carcinogenesis. *Hum. Mutat.* 15: 105-113.

## CHROMOSOMAL LOCATION

Genetic locus: TTC25 (human) mapping to 17q21.2; Ttc25 (mouse) mapping to 11 D.

## SOURCE

TTC25 (B-9) is a mouse monoclonal antibody raised against amino acids 181-480 mapping within an internal region of TTC25 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TTC25 (B-9) is available conjugated to agarose (sc-376533 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376533 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376533 PE), fluorescein (sc-376533 FITC), Alexa Fluor® 488 (sc-376533 AF488), Alexa Fluor® 546 (sc-376533 AF546), Alexa Fluor® 594 (sc-376533 AF594) or Alexa Fluor® 647 (sc-376533 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376533 AF680) or Alexa Fluor® 790 (sc-376533 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

TTC25 (B-9) is recommended for detection of TTC25 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for TTC25 siRNA (h): sc-93754, TTC25 siRNA (m): sc-154763, TTC25 shRNA Plasmid (h): sc-93754-SH, TTC25 shRNA Plasmid (m): sc-154763-SH, TTC25 shRNA (h) Lentiviral Particles: sc-93754-V and TTC25 shRNA (m) Lentiviral Particles: sc-154763-V.

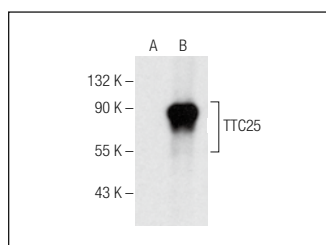
Molecular Weight of TTC25 isoforms: 77/33 kDa.

Positive Controls: TTC25 (h): 293T Lysate: sc-111496.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



TTC25 (B-9): sc-376533. Western blot analysis of TTC25 expression in non-transfected: sc-117752 (A) and human TTC25 transfected: sc-111496 (B) 293T whole cell lysates.

## 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) for detailed protocols and support products.

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