

TCP-10 (E-6): sc-398772



The Power to Question

BACKGROUND

TCP-10 (t-complex 10 homolog), also known as TCP10A, is a 353 amino acid protein belonging to the TCP10 family. TCP-10 exists as two alternatively spliced isoforms and is encoded by a gene located human chromosome 6q27. Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6.

REFERENCES

1. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
2. Vuoristo, M.M., et al. 2004. A stop codon mutation in COL11A2 induces exon skipping and leads to non-ocular Stickler syndrome. *Am. J. Med. Genet. A* 130A: 160-164.
3. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. *Am. J. Hum. Genet.* 77: 582-595.

CHROMOSOMAL LOCATION

Genetic locus: TCP10 (human) mapping to 6q27.

SOURCE

TCP-10 (E-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 258-282 within an internal region of TCP-10 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TCP-10 (E-6) is available conjugated to agarose (sc-398772 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398772 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398772 PE), fluorescein (sc-398772 FITC), Alexa Fluor® 488 (sc-398772 AF488), Alexa Fluor® 546 (sc-398772 AF546), Alexa Fluor® 594 (sc-398772 AF594) or Alexa Fluor® 647 (sc-398772 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398772 AF680) or Alexa Fluor® 790 (sc-398772 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398772 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

TCP-10 (E-6) is recommended for detection of TCP-10 of 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 TCP-10 siRNA (h): sc-95400, TCP-10 shRNA Plasmid (h): sc-95400-SH and TCP-10 shRNA (h) Lentiviral Particles: sc-95400-V.

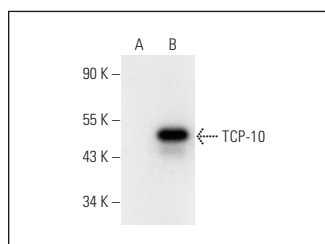
Molecular Weight of TCP-10 isoforms: 38/35 kDa.

Positive Controls: TCP-10 (h): 293T Lysate: sc-371257.

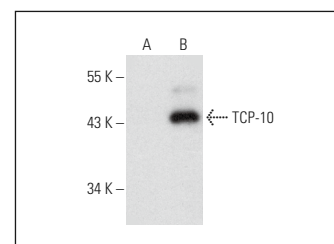
RECOMMENDED SUPPORT REAGENTS

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



TCP-10 (E-6): sc-398772. Western blot analysis of TCP-10 expression in non-transfected: sc-117752 (A) and human TCP-10 transfected: sc-371257 (B) 293T whole cell lysates.



TCP-10 (E-6): sc-398772. Western blot analysis of TCP-10 expression in non-transfected: sc-117752 (A) and human TCP-10 transfected: sc-116766 (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 for detailed protocols and support products.

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