

# TCP-11 (E-20): sc-162304

## BACKGROUND

TCP-11 (t-complex protein 11), also known as D6S230E, is a 503 amino acid single-pass membrane protein expressed only in fertile adult testis and is a member of the TCP-11 family. Localized to the surface of mature epididymal spermatozoa, TCP-11 may be a receptor for the fertilization promoting peptide (FPP), a peptide produced by the prostate gland and then secreted into seminal plasma. The adenylate cyclase/cyclic AMP pathway is considered to be the signal transduction pathway that is activated by the association between FPP and TCP-11. TCP-11 is suggested to play a critical role in the regulation of sperm function and fertility. The gene encoding TCP-11 is located on human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Three isoforms of TCP-11 are produced by alternative splicing events.

## REFERENCES

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- Ma, Y., et al. 2002. Molecular characterization of the TCP11 gene which is the human homologue of the mouse gene encoding the receptor of fertilization promoting peptide. *Mol. Hum. Reprod.* 8: 24-31.
- Safronova, L.D., et al. 2002. Sterility of males determined by functional features of the mouse spermatozoa bearing t-complex. *Ontogenez* 33: 165-169.
- Ma, Y.X., et al. 2003. Cloning, expression, and alternative splicing of the novel isoform of hTCP11 gene. *Zhongguo Yi Xue Ke Xue Yuan Xue Bao* 25: 122-128.

## CHROMOSOMAL LOCATION

Genetic locus: *Tcp11* (mouse) mapping to 17 A3.3.

## SOURCE

TCP-11 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TCP-11 of mouse 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-162304 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

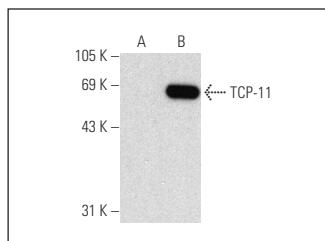
TCP-11 (E-20) is recommended for detection of TCP-11 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TCP family members.

Suitable for use as control antibody for TCP-11 siRNA (m): sc-154143, TCP-11 shRNA Plasmid (m): sc-154143-SH and TCP-11 shRNA (m) Lentiviral Particles: sc-154143-V.

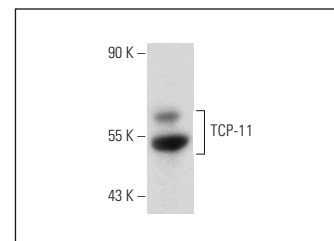
Molecular Weight of TCP-11: 49-56 kDa.

Positive Controls: TCP-11 (m): 293T Lysate: sc-123960, rat testis extract: sc-2400 or F9 cell lysate: sc-2245.

## DATA



TCP-11 (E-20): sc-162304. Western blot analysis of TCP-11 expression in non-transfected: sc-117752 (A) and mouse TCP-11 transfected: sc-123960 (B) 293T whole cell lysates.



TCP-11 (E-20): sc-162304. Western blot analysis of TCP-11 expression in rat testis tissue extract.

## 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.