

# TDRD1 (D-17): sc-165663

## BACKGROUND

TDRD1 (tudor domain containing 1), also known as CT41.1 (cancer/testis antigen 41.1), is a 1,180 amino acid cytoplasmic protein that prevents mobilization of transposable elements during spermatogenesis, thereby contributing to germline integrity. A member of the TDRD1 family, TDRD1 is expressed specifically in ovary and testis, as well as a number of cancers. TDRD1 contains one MYND-type zinc finger and four tudor domains, and forms a mRNP complex with TDRD6, TDRD7 and VASA. TDRD1 plays an important role in piRNA metabolic processes and contributes to PIWI protein localization to the meiotic nuage. Existing as four alternatively spliced isoforms, TDRD1 is encoded by a gene that maps to human chromosome 10q25.3.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TDRD1 (human) mapping to 10q25.3; Tdrd1 (mouse) mapping to 19 D2.

## SOURCE

TDRD1 (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TDRD1 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-165663 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TDRD1 (D-17) is recommended for detection of TDRD1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 TDRD family members.

TDRD1 (D-17) is also recommended for detection of TDRD1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for TDRD1 siRNA (h): sc-90747, TDRD1 siRNA (m): sc-154163, TDRD1 shRNA Plasmid (h): sc-90747-SH, TDRD1 shRNA Plasmid (m): sc-154163-SH, TDRD1 shRNA (h) Lentiviral Particles: sc-90747-V and TDRD1 shRNA (m) Lentiviral Particles: sc-154163-V.

Molecular Weight of TDRD1 isoforms: 132/119/133/79 kDa.

## 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) 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.

## 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.