

# TWA1 (W-18): sc-85985

## BACKGROUND

TWA1 (Two hybrid-associated protein 1 with Ran BP-M), also known as Protein C20orf11, is a 228 amino acid nuclear protein that is highly conserved throughout evolution. TWA1 interacts with Ran BP-M, a protein that is implicated in a diverse array of cellular processes including DNA replication, entry into and exit from mitosis, and the transport of RNA and proteins through the nuclear pore complex. Together, Ran BP-M and TWA1 form a complex with cytoplasmic Muskelein, a mediator of cell spreading. It is thought that this complex plays a role in the Ran GTPase cycle and therefore a potential role in the cell cycle. TWA1 contains a LisH-CTLH motif which is usually found in proteins that are involved in nucleokinesis, chromosome segregation, cell migration and microtubule dynamics. The gene encoding TWA1 maps to human chromosome 20, which comprises approximately 2% of the human genome and contains nearly 63 million bases that encode over 600 genes.

## REFERENCES

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7. Rensen, W.M., Mangiacasale, R., Ciciarello, M. and Lavia, P. 2008. The GTPase Ran: regulation of cell life and potential roles in cell transformation. *Front. Biosci.* 13: 4097-4121.
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## CHROMOSOMAL LOCATION

Genetic locus: C20orf11 (human) mapping to 20q13.33; 2310003C23Rik (mouse) mapping to 2 H4.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## SOURCE

TWA1 (W-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TWA1 of human 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-85985 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TWA1 (W-18) is recommended for detection of TWA1 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).

Suitable for use as control antibody for TWA1 siRNA (h): sc-76778, TWA1 siRNA (m): sc-154811, TWA1 shRNA Plasmid (h): sc-76778-SH, TWA1 shRNA Plasmid (m): sc-154811-SH, TWA1 shRNA (h) Lentiviral Particles: sc-76778-V and TWA1 shRNA (m) Lentiviral Particles: sc-154811-V.

Molecular Weight of TWA1: 27 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.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.