

# TBRG1 (N-22): sc-130612

## BACKGROUND

TBRG1 (transforming growth factor  $\beta$  regulator 1), also known as TB-5 or NIAM, is a 411 amino acid protein that localizes to the nucleus and contains one FY-rich C-terminal domain and one FY-rich N-terminal domain. Expressed in a variety of tissues, including liver, lung and pancreas, TBRG1 functions as a growth inhibitor that interacts with p14 ARF and MDM2 and is involved in maintaining chromosome stability. Additionally, TBRG1 can activate p53 function, thereby causing cell-cycle arrest and effectively restricting cell proliferation. TBRG1 expression is downregulated in breast, pancreas and kidney tumors, suggesting that TBRG1 participates in tumor suppression. TBRG1 exists as multiple alternatively spliced isoforms and is subject to MDM2-mediated ubiquitination and subsequent proteasomal degradation.

## REFERENCES

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2. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610614. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Tompkins, V., Hagen, J., Zediak, V.P. and Quelle, D.E. 2006. Identification of novel ARF binding proteins by two-hybrid screening. *Cell Cycle* 5: 641-646.
4. Tompkins, V.S., Hagen, J., Frazier, A.A., Lushnikova, T., Fitzgerald, M.P., di Tommaso, A., Ladeveze, V., Domann, F.E., Eischen, C.M. and Quelle, D.E. 2007. A novel nuclear interactor of ARF and MDM2 (NIAM) that maintains chromosomal stability. *J. Biol. Chem.* 282: 1322-1333.
5. Hagen, J., Tompkins, V., Dudakovic, A., Weydert, J.A. and Quelle, D.E. 2008. Generation and characterization of monoclonal antibodies to NIAM: a nuclear interactor of ARF and MDM2. *Hybridoma* 27: 159-166.

## CHROMOSOMAL LOCATION

Genetic locus: TBRG1 (human) mapping to 11q24.2; Tbrg1 (mouse) mapping to 9 A4.

## SOURCE

TBRG1 (N-22) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of TBRG1 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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.

## APPLICATIONS

TBRG1 (N-22) is recommended for detection of TBRG1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

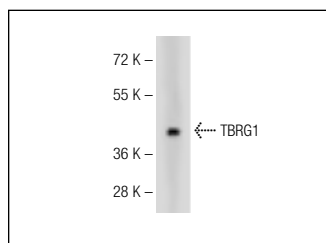
Suitable for use as control antibody for TBRG1 siRNA (h): sc-96858, TBRG1 siRNA (m): sc-154124, TBRG1 shRNA Plasmid (h): sc-96858-SH, TBRG1 shRNA Plasmid (m): sc-154124-SH, TBRG1 shRNA (h) Lentiviral Particles: sc-96858-V and TBRG1 shRNA (m) Lentiviral Particles: sc-154124-V.

Molecular Weight of TBRG1: 50 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## DATA



TBRG1 (N-22): sc-130612. Western blot analysis of TBRG1 expression in mouse kidney tissue extract.

## RESEARCH USE

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

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Try **TBRG1 (D-9): sc-515620**, our highly recommended monoclonal alternative to TBRG1 (N-22).