

TBRG1 (m2): 293T Lysate: sc-123942

BACKGROUND

TBRG1 (transforming growth factor β 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

1. Babalola, G.O. and Schultz, R.M. 1995. Modulation of gene expression in the preimplantation mouse embryo by TGF α and TGF β . *Mol. Reprod. Dev.* 41: 133-139.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610614. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Tompkins, V., et al. 2006. Identification of novel ARF binding proteins by two-hybrid screening. *Cell Cycle* 5: 641-646.
4. Tompkins, V.S., et al. 2007. A novel nuclear interactor of ARF and MDM2 (NIAM) that maintains chromosomal stability. *J. Biol. Chem.* 282: 1322-1333.
5. Hagen, J., et al. 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 (mouse) mapping to 9 A4.

PRODUCT

TBRG1 (m2): 293T Lysate represents a lysate of mouse TBRG1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

TBRG1 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TBRG1 antibodies. Recommended use: 10-20 μ l per lane.

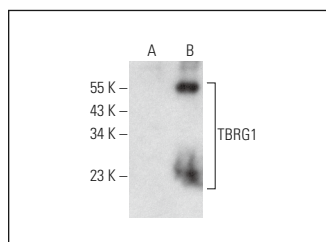
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TBRG1 (D-9): sc-515620 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TBRG1 expression in TBRG1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



TBRG1 (D-9): sc-515620. Western blot analysis of TBRG1 expression in non-transfected: sc-117752 (A) and mouse TBRG1 transfected: sc-123942 (B) 293T whole cell lysates.

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.