

TSR1 (A-12): sc-161249

BACKGROUND

TSR1 (pre-rRNA-processing protein TSR1 homolog) is an 804 amino acid protein that localizes to nucleolus and belongs to the BMS1/TSR1 family and TSR1 subfamily. Highly expressed in all regions of the brain, TSR1 is also found in skeletal muscle, kidney, testis, ovary, liver, heart and spinal cord, with low expression in spleen and pancreas. Essential for 40S ribosomal subunit maturation, TSR1 is encoded by a gene that maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, and is linked to predisposition of cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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- Gelperin, D., et al. 2001. Bms1p, a novel GTP-binding protein, and the related Tsr1p are required for distinct steps of 40S ribosome biogenesis in yeast. *RNA* 7: 1268-1283.
- Donadio, S., et al. 2003. Recognition of cell surface acceptors by two human α -2,6-sialyltransferases produced in CHO cells. *Biochimie* 85: 311-321.

CHROMOSOMAL LOCATION

Genetic locus: TSR1 (human) mapping to 17p13.3; Tsr1 (mouse) mapping to 11 B5.

SOURCE

TSR1 (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TSR1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161249 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSR1 (A-12) is recommended for detection of TSR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 TSR2.

TSR1 (A-12) is also recommended for detection of TSR1 in additional species, including bovine.

Suitable for use as control antibody for TSR1 siRNA (h): sc-93877, TSR1 siRNA (m): sc-154736, TSR1 shRNA Plasmid (h): sc-93877-SH, TSR1 shRNA Plasmid (m): sc-154736-SH, TSR1 shRNA (h) Lentiviral Particles: sc-93877-V and TSR1 shRNA (m) Lentiviral Particles: sc-154736-V.

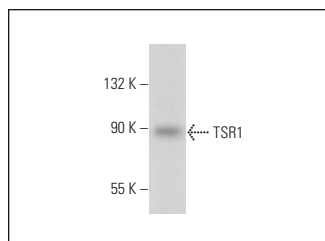
Molecular Weight of TSR1: 92 kDa.

Positive Controls: mouse liver extract: sc-2256.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TSR1 (A-12): sc-161249. Western blot analysis of TSR1 expression in mouse liver 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 or our catalog for detailed protocols and support products.