# TBRG4 (B-1): sc-373752



The Power to Question

### **BACKGROUND**

TBRG4 (transforming growth factor β regulator 4), also known as CPR2 (cell cycle progression restoration protein 2) or FASTKD4 (FAST kinase domain-containing protein 4), is a 631 amino acid protein that contains one RAP domain and belongs to the FAST kinase family. TBRG4 is ubiquitously expressed and may have a role in cell cycle progression. Existing as two alternatively spliced isoforms, the gene encoding TBRG4 maps to human chromosome 7p13. Chromosome 7 is approximately 158 million bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the g arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

### **REFERENCES**

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- 3. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
- Eckert, M.A., et al. 2006. The neurobiology of Williams syndrome: cascading influences of visual system impairment? Cell. Mol. Life Sci. 63: 1867-1875.
- Aglipay, J.A., et al. 2006. ATM activation by ionizing radiation requires BRCA1-associated BAAT1. J. Biol. Chem. 281: 9710-9718.
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## **CHROMOSOMAL LOCATION**

Genetic locus: TBRG4 (human) mapping to 7p13.

## **SOURCE**

TBRG4 (B-1) is a mouse monoclonal antibody raised against amino acids 370-631 mapping at the C-terminus of TBRG4 of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g \, lg G_{2b}$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### **APPLICATIONS**

TBRG4 (B-1) is recommended for detection of TBRG4 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 1:30-1:3001)

Suitable for use as control antibody for TBRG4 siRNA (h): sc-89508, TBRG4 shRNA Plasmid (h): sc-89508-SH and TBRG4 shRNA (h) Lentiviral Particles: sc-89508-V.

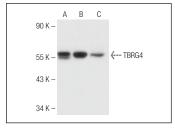
Molecular Weight of TBRG4 isoforms 1/2: 71/58 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or human liver extract: sc-363766.

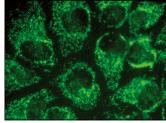
### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz\* Blocking Reagent: sc-516214 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 m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz\* Mounting Medium: sc-24941 or UltraCruz\* Hard-set Mounting Medium: sc-359850.

#### DATA



TBRG4 (B-1): sc-373752. Western blot analysis of TBRG4 expression in Hep G2 (**A**) and HeLa (**B**) whole cell lysates and human liver tissue extract (**C**).



TBRG4 (B-1): sc-373752. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

#### **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 for detailed protocols and support products.