

BRI3BP (S-18): sc-161395

BACKGROUND

BRI3BP (BRI3 binding protein), also known as BNAS1, HCCR-1, I3-binding protein or cervical cancer 1 proto-oncogene-binding protein KG19, is a 251 amino acid multi-pass membrane protein. Though widely expressed, BRI3BP is found at highest levels in brain, kidney and liver where it localizes to the endoplasmic reticulum (ER) and is involved in ER structural dynamics and mitochondrial viability. Possessing pro-apoptotic properties and the ability to potentiate drug-induced apoptosis, BRI3BP overexpression has been shown to enhance caspase-3 and mitochondrial cytochrome c release in etoposide-treated human embryonic kidney 293T cells. The gene encoding BRI3BP maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including achondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

1. Delgado Carrasco, J., Casanova Morcillo, A., Zabalza Alvillos, M. and Ayala Garces, A. 2001. Achondrogenesis type II-hypochondrogenesis: radiological features. Case report. *An. Esp. Pediatr.* 55: 553-557.
2. Lin, L., Wu, Y., Li, C. and Zhao, S. 2001. Cloning, tissue expression pattern, and chromosome location of a novel human gene BRI3BP. *Biochem. Genet.* 39: 369-377.
3. Yokoyama, T., Nakatani, S. and Murakami, A. 2003. A case of Kniest dysplasia with retinal detachment and the mutation analysis. *Am. J. Ophthalmol.* 136: 1186-1188.
4. Forzano, F., Lituania, M., Viassolo, A., Superti-Furga, V., Wildhardt, G., Zabel, B. and Faravelli, F. 2007. A familial case of achondrogenesis type II caused by a dominant COL2A1 mutation and "patchy" expression in the mosaic father. *Am. J. Med. Genet. A* 143A: 2815-2820.

CHROMOSOMAL LOCATION

Genetic locus: BRI3BP (human) mapping to 12q24.31; Bri3bp (mouse) mapping to 5 G1.1.

SOURCE

BRI3BP (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BRI3BP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161395 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

BRI3BP (S-18) is recommended for detection of BRI3BP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 1:30-1:3000).

BRI3BP (S-18) is also recommended for detection of BRI3BP in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for BRI3BP siRNA (h): sc-95884, BRI3BP siRNA (m): sc-141746, BRI3BP shRNA Plasmid (h): sc-95884-SH, BRI3BP shRNA Plasmid (m): sc-141746-SH, BRI3BP shRNA (h) Lentiviral Particles: sc-95884-V and BRI3BP shRNA (m) Lentiviral Particles: sc-141746-V.

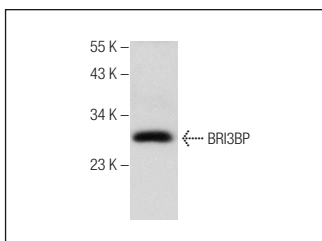
Molecular Weight of BRI3BP: 28 kDa.

Positive Controls: Mouse brain extract: sc-2253.

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



BRI3BP (S-18): sc-161395. Western blot analysis of BRI3BP expression in mouse brain tissue extract.

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.