SANTA CRUZ BIOTECHNOLOGY, INC.

GTPBP4 (T-15): sc-160426

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Small G proteins act as molecular switches for regulation of variety of cellular processes, such as nuclear transport, signal transduction, membrane trafficking and protein synthesis. GTPBP4 (GTP binding protein 4), also designated nucleolar GTP-binding protein 1, chronic renal failure gene protein (CRFG), NOG1 or NGB, is a 634 amino acid novel GTP-binding protein that plays a role in 60S ribosomal subunit biogenesis and belongs to the GTP1/OBG family and NOG subfamily. Localizing to nucleolus, GTPBP4 has been observed to inhibit cell aggregation and growth when ectopically expressed in tumorigenic schwanomma cells, and is believed to act as a tumor supressor when working in conjunction with NF2 (merlin). GTPBP4 contains multiple phosphorylated amino acid residues and is encoded by a gene located on human chromosome 10p15.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GTPBP4 (human) mapping to 10p15.3; Gtpbp4 (mouse) mapping to 13 A1.

SOURCE

GTPBP4 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GTPBP4 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-160426 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GTPBP4 (T-15) is recommended for detection of GTPBP4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 other GTPBP family members.

GTPBP4 (T-15) is also recommended for detection of GTPBP4 in additional species, including equine and bovine.

Suitable for use as control antibody for GTPBP4 siRNA (h): sc-90817, GTPBP4 siRNA (m): sc-145829, GTPBP4 shRNA Plasmid (h): sc-90817-SH, GTPBP4 shRNA Plasmid (m): sc-145829-SH, GTPBP4 shRNA (h) Lentiviral Particles: sc-90817-V and GTPBP4 shRNA (m) Lentiviral Particles: sc-145829-V.

Molecular Weight of GTPBP4: 74 kDa.

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) 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.

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.