SANTA CRUZ BIOTECHNOLOGY, INC.

ZNHIT1 (T-13): sc-244823

BACKGROUND

ZNHIT1 (zinc finger, HIT-type containing 1), also known as CG1I (cyclin-G1-binding protein 1), p18 hamlet or ZNFN4A1 (zinc-finger protein subfamily 4A member 1), is a 154 amino acid protein that plays a role in the induction of p53-mediated apoptosis. A member of the ZNHIT1 family, ZNHIT1 contains one HIT-type zinc finger and interacts with p38. ZNHIT1 undergoes post-translational phosphorylation and is encoded by a gene that maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 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.

REFERENCES

1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro alpha 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
2. Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
3. Cai, Y., et al. 2005. The mammalian YL1 protein is a shared subunit of the TRRAP/TIP60 histone acetyltransferase and SRCAP complexes. J. Biol. Chem. 280: 13665-13670.
4. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. Neuromolecular Med. 8: 547-565.
5. Gilbert-Dussardier, B. 2006. [Williams-Beuren syndrome]. Rev. Prat. 56: 2102-2106.
6. Sjöblom, T., et al. 2006. The consensus coding sequences of human breast and colorectal cancers. Science 314: 268-274.
7. Lafarga, V., et al. 2007. p18(Hamlet) mediates different p53-dependent responses to DNA-damage inducing agents. Cell Cycle. 6: 2319-2322.
8. Cuadrado, A., et al. 2007. A new p38 MAP kinase-regulated transcriptional coactivator that stimulates p53-dependent apoptosis. EMBO J. 26: 2115-2126.

CHROMOSOMAL LOCATION

Genetic locus: ZNHIT1 (human) mapping to 7q22.1; Znhit1 (mouse) mapping to 5 G2.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

SOURCE

ZNHIT1 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNHIT1 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-244823 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNHIT1 (T-13) is recommended for detection of ZNHIT1 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 ZNHIT2, ZNHIT3 or ZNHIT6.

Suitable for use as control antibody for ZNHIT1 siRNA (h): sc-89847, ZNHIT1 siRNA (m): sc-155809, ZNHIT1 shRNA Plasmid (h): sc-89847-SH, ZNHIT1 shRNA Plasmid (m): sc-155809-SH, ZNHIT1 shRNA (h) Lentiviral Particles: sc-89847-V and ZNHIT1 shRNA (m) Lentiviral Particles: sc-155809-V.

Molecular Weight of ZNHIT1: 18 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.