SANTA CRUZ BIOTECHNOLOGY, INC.

NID67 (S-12): sc-165112

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

NID67 (NGF-induced differentiation clone 67 protein), also known as C5orf62, is a 60 amino acid single-pass membrane protein that is induced by NGF. The gene that encodes NID67 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
2. Saltman, D.L., et al. 1993. A physical map of 15 loci on human chromosome 5q23-q33 by two-color fluorescence *in situ* hybridization. Genomics 16: 726-732.
3. Law, S.F., et al. 1998. Cell cycle-regulated processing of HEF1 to multiple protein forms differentially targeted to multiple subcellular compartments. Mol. Cell. Biol. 18: 3540-3551.
4. Vician, L., et al. 2001. NID67, a small putative membrane protein, is preferentially induced by NGF in PC12 pheochromocytoma cells. J. Neurosci. Res. 64: 108-120.
5. South, S.T., et al. 2006. A new genomic mechanism leading to Cri-du-chat syndrome. Am. J. Med. Genet. A 140: 2714-2720.
6. Du, H.Y., et al. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p- syndrome. Aging Cell 6: 689-697.

CHROMOSOMAL LOCATION

Genetic locus: C5orf62 (human) mapping to 5q33.1.

SOURCE

NID67 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NID67 of human origin.

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.

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-165112 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NID67 (S-12) is recommended for detection of NID67 of 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).

Suitable for use as control antibody for NID67 siRNA (h): sc-91840, NID67 shRNA Plasmid (h): sc-91840-SH and NID67 shRNA (h) Lentiviral Particles: sc-91840-V.

Molecular Weight of NID67: 7 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.