

# NID67 (Q-14): sc-165111

## 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: 2010002N04Rik (mouse) mapping to 18 D3.

## SOURCE

NID67 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NID67 of mouse 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](http://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-165111 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NID67 (Q-14) is recommended for detection of NID67 of mouse and rat 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 (m): sc-149971, NID67 shRNA Plasmid (m): sc-149971-SH and NID67 shRNA (m) Lentiviral Particles: sc-149971-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.