SANTA CRUZ BIOTECHNOLOGY, INC.

neogenin (N-19): sc-6537

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Neogenin (NGN) was first identified in chicken as a highly regulated protein in the developing nervous system and gastrointestinal tract. The human homolog is roughly 50% identical to the protein DCC (deleted in colorectal cancer), a candidate tumor suppressor that is also involved in neural development. DCC and neogenin may play complementary roles in the generation of the fully functional central nervous system. Neogenin is expressed in most normal tissues; in contrast to DCC, it is also detected at normal levels in cancer tissues. Neogenin is a member of the N-CAM family of cell adhesion molecules and is expressed on the surfaces of growing nerve cells as well as in a number of other developing embryonic tissues.

REFERENCES

1. Fearon, E.R., et al. 1990. Identification of a chromosome 18q gene that is altered in colorectal cancers. Science 247: 49-56.
2. Vielmetter, J., et al. 1994. Neogenin, an avian cell surface protein expressed during terminal neuronal differentiation, is closely related to the human tumor suppressor molecule deleted in colorectal cancer. J. Cell Biol. 127: 2009-2020.
3. Hedrick, L., et al. 1994. The DCC gene product in cellular differentiation and colorectal tumorigenesis. Genes Dev. 8: 1174-1183.

CHROMOSOMAL LOCATION

Genetic locus: NEO1 (human) mapping to 15q24.1

SOURCE

neogenin (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of neogenin 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-6537 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

neogenin (N-19) is recommended for detection of neogenin 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), immunohistochemistry (including paraffin-embedded sections) (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 neogenin siRNA (h): sc-36028, neogenin shRNA Plasmid (h): sc-36028-SH and neogenin shRNA (h) Lentiviral Particles: sc-36028-V.

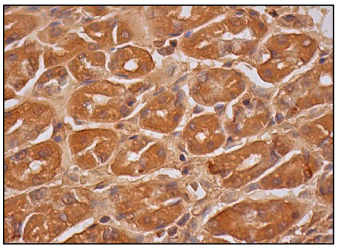
Molecular Weight of neogenin: 160 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



neogenin (N-19): sc-6537. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Yebra, M., et al. 2003. Recognition of the neural chemoattractant Netrin-1 by integrins $\alpha 6\beta 4$ and $\alpha 3\beta 1$ regulates epithelial cell adhesion and migration. Development 5: 695-707.
2. Park, K.W., et al. 2004. The axonal attractant Netrin-1 is an angiogenic factor. Proc. Natl. Acad. Sci. USA 101: 16210-16215.
3. Metzger, M., et al. 2007. RGMa inhibits neurite outgrowth of neuronal progenitors from murine enteric nervous system via the neogenin receptor *in vitro*. J. Neurochem. 103: 2665-2678.

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.