

# neogenin (H-175): sc-15337

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: NEO1 (human) mapping to 15q24.1; Neo1 (mouse) mapping to 9 B.

## SOURCE

neogenin (H-175) is a rabbit polyclonal antibody raised against amino acids 1171-1345 mapping near the C-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.

## APPLICATIONS

neogenin (H-175) is recommended for detection of neogenin of mouse, rat, human and zebrafish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

neogenin (H-175) is also recommended for detection of neogenin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for neogenin siRNA (h): sc-36028, neogenin siRNA (m): sc-36029, neogenin shRNA Plasmid (h): sc-36028-SH, neogenin shRNA Plasmid (m): sc-36029-SH, neogenin shRNA (h) Lentiviral Particles: sc-36028-V and neogenin shRNA (m) Lentiviral Particles: sc-36029-V.

Molecular Weight of neogenin: 160 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or T84 whole cell lysate: sc-364797.

## STORAGE

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

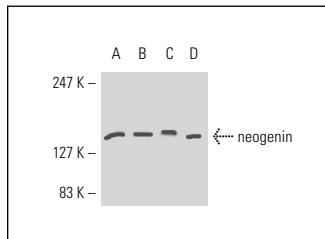
## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

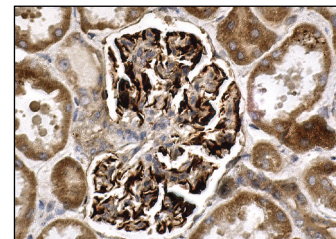
## RESEARCH USE

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

## DATA



neogenin (H-175): sc-15337. Western blot analysis of neogenin expression in HeLa (A), Ca Ski (B), T84 (C) and A549 (D) whole cell lysates.



neogenin (H-175): sc-15337. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane staining of glomerular cells and cytoplasmic staining of cells in tubules.

## SELECT PRODUCT CITATIONS

- Srinivasan, K., et al. 2003. Netrin-1/neogenin interaction stabilizes multipotent progenitor cap cells during mammary gland morphogenesis. *Dev. Cell* 4: 371-382.
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- Rajagopalan, S., et al. 2004. Neogenin mediates the action of repulsive guidance molecule. *Nat. Cell Biol.* 6: 756-762.
- Hinck, L., et al. 2004. Functional disruption of the netrin-1 guidance cue leads to disruption in mammary gland development and increased tumor incidence. E-published.
- Zhang, A., et al. 2005. Interaction of hemojuvelin with neogenin results in iron accumulation in human embryonic kidney 293 cells. *J. Biol. Chem.* 280: 33885-33894.
- Strizzi, L., et al. 2005. Netrin-1 regulates invasion and migration of mouse mammary epithelial cells overexpressing Cripto-1 *in vitro* and *in vivo*. *J. Cell Sci.* 118: 4633-4643.
- Lee, J.E., et al. 2005. Neogenin expression may be inversely correlated to the tumorigenicity of human breast cancer. *BMC Cancer* 5: 154.
- Matsunaga, E., et al. 2006. Repulsive guidance molecule plays multiple roles in neuronal differentiation and axon guidance. *J. Neurosci.* 26: 6082-6088.
- Dong, J., et al. 2011. ID4 regulates mammary gland development by suppressing p38<sup>MAPK</sup> activity. *Development* 138: 5247-5256.



Try **neogenin (G-7): sc-514872**, our highly recommended monoclonal alternative to neogenin (H-175).