

N-cadherin (H-63): sc-7939

BACKGROUND

Cadherins comprise a family of Ca^{2+} -dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. The classical cadherins, E-, N- and P-cadherin, consist of large extracellular domains characterized by a series of five homologous NH_2 terminal repeats. The most distal of these cadherins is thought to be responsible for binding specificity, transmembrane domains and carboxy terminal intracellular domains. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as β -catenin, to regulate cadherin function. Members of this family of adhesion proteins include rat cadherin K (and its human homolog, cadherin-6), R-cadherin, B-cadherin, E/P-cadherin and cadherin-5.

CHROMOSOMAL LOCATION

Genetic locus: CDH2 (human) mapping to 18q12.1; Cdh2 (mouse) mapping to 18 A1.

SOURCE

N-cadherin (H-63) is a rabbit polyclonal antibody raised against amino acids 450-512 mapping within an extracellular domain of N-cadherin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

N-cadherin (H-63) is recommended for detection of N-cadherin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

N-cadherin (H-63) is also recommended for detection of N-cadherin in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for N-cadherin siRNA (h): sc-29403, N-cadherin siRNA (m): sc-35999, N-cadherin shRNA Plasmid (h): sc-29403-SH, N-cadherin shRNA Plasmid (m): sc-35999-SH, N-cadherin shRNA (h) Lentiviral Particles: sc-29403-V and N-cadherin shRNA (m) Lentiviral Particles: sc-35999-V.

Molecular Weight of N-cadherin: 130 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, A-10 cell lysate: sc-3806 or mouse brain extract: sc-2253.

RESEARCH USE

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

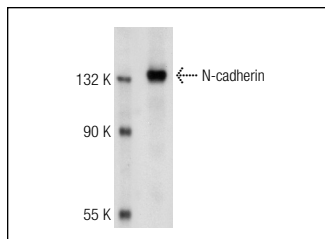
PROTOCOLS

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

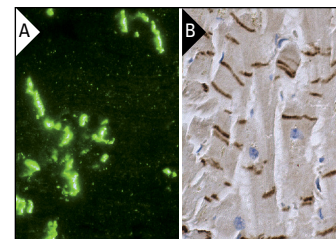
STORAGE

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

DATA



N-cadherin (H-63): sc-7939. Western blot analysis of N-cadherin expression in mouse brain tissue extract.



N-cadherin (H-63): sc-7939. Immunofluorescence staining of normal mouse heart frozen section showing membrane (cell-cell adhesion) staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing membrane (cell-cell adhesion) staining of myocytes (B).

SELECT PRODUCT CITATIONS

- Liu, Y., et al. 2000. EDG-1, the G protein-coupled receptor for sphingosine-1-phosphate, is essential for vascular maturation. *J. Clin. Invest.* 106: 951-961.
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- Lie, P.P., et al. 2011. Interleukin-1 α is a regulator of the blood-testis barrier. *FASEB J.* 25: 1244-1253.
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