**BACKGROUND**

Cadherins comprise a family of Ca²⁺-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 NH₂ 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 K-cadherin (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 (D-4) is a mouse monoclonal antibody raised against amino acids 450-512 within the extracellular domain of N-cadherin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

N-cadherin (D-4) is available conjugated to agarose (sc-8424 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8424 HRP), 200 µg/ml, for WB, ELISA, and solid phase ELISA (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).

N-cadherin (D-4) is also recommended for detection of N-cadherin in additional species, including equine and canine.

Suitable for use as control antibody for N-cadherin siRNA (h): sc-29403, N-cadherin siRNA (m): sc-35999, N-cadherin siRNA (r): sc-270280, N-cadherin shRNA Plasmid (h): sc-29403-Sh, N-cadherin shRNA Plasmid (m): sc-35999-Sh, N-cadherin shRNA Plasmid (r): sc-270280-Sh, N-cadherin shRNA (h) Lentiviral Particles: sc-29403-V, N-cadherin shRNA (m) Lentiviral Particles: sc-35999-V and N-cadherin shRNA (r) Lentiviral Particles: sc-270280-V.

Molecular Weight of N-cadherin: 130 kDa.

**APPLICATIONS**

N-cadherin (D-4) 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 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). N-cadherin (D-4) is also recommended for detection of N-cadherin in additional species, including equine and canine.

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

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**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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