**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 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 (8C11) is a mouse monoclonal antibody raised against the extracellular domain of N-cadherin of human origin.

**PRODUCT**

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

N-cadherin (8C11) is available conjugated to agarose (sc-53488 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53488 HRP), 200 µg/ml, for WB, (HiP) and ELISA; to either phycoerythrin (sc-53488 PE), fluorescein (sc-53488 FITC), Alexa Fluor® 488 (sc-53488 AF488), Alexa Fluor® 568 (sc-53488 AF568), Alexa Fluor® 594 (sc-53488 AF594) or Alexa Fluor® 647 (sc-53488 AF647), 200 µg/ml, for WB (RGB), IF, HiP and FC; and to either Alexa Fluor® 680 (sc-53488 AF680) or Alexa Fluor® 790 (sc-53488 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FC.

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**APPLICATIONS**

N-cadherin (8C11) 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of N-cadherin: 130 kDa.

Positive Controls: N-cadherin (m): 293T Lysate: sc-121905, mouse brain extract: sc-2253 or human heart extract: sc-363763.

**RESEARCH USE**

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