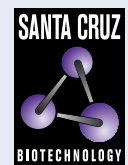


cadherin-19 (D-1): sc-376990



The Power to Question

BACKGROUND

The cadherins are a family of Ca²⁺-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of structure and morphogenesis. Cadherins each contain a large extracellular domain at the N-terminus, which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. Cadherin-19, also known as CDH19, CDH7 or CDH7L2, is a 772 amino acid single-pass type I membrane protein that contains five cadherin domains. Expressed in a variety of tissues, cadherin-19 functions as a Ca²⁺-dependent cell-cell adhesion glycoprotein that is thought to be involved in the sorting of heterogeneous cell types. The gene encoding cadherin-19 maps to a cadherin cluster on human chromosome 18, a chromosome which houses over 300 protein-coding genes and contains nearly 76 million bases.

REFERENCES

1. Kremmidiotis, G., et al. 1998. Localization of human cadherin genes to chromosome regions exhibiting cancer-related loss of heterozygosity. *Genomics* 49: 467-471.
2. Shimoyama, Y., et al. 2000. Identification of three human type-II classic cadherins and frequent heterophilic interactions between different subclasses of type-II classic cadherins. *Biochem. J.* 349: 159-167.
3. Kools, P., et al. 2000. Characterization of three novel human cadherin genes (CDH7, CDH19, and CDH20) clustered on chromosome 18q22-q23 and with high homology to chicken cadherin-7. *Genomics* 68: 283-295.

CHROMOSOMAL LOCATION

Genetic locus: CDH19 (human) mapping to 18q22.1.

SOURCE

cadherin-19 (D-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 365-397 within an extracellular domain of cadherin-19 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.

cadherin-19 (D-1) is available conjugated to agarose (sc-376990 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376990 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376990 PE), fluorescein (sc-376990 FITC), Alexa Fluor® 488 (sc-376990 AF488), Alexa Fluor® 546 (sc-376990 AF546), Alexa Fluor® 594 (sc-376990 AF594) or Alexa Fluor® 647 (sc-376990 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376990 AF680) or Alexa Fluor® 790 (sc-376990 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376990 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

cadherin-19 (D-1) is recommended for detection of cadherin-19 of human origin by Western Blotting (starting dilution 1:100, 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for cadherin-19 siRNA (h): sc-72774, cadherin-19 shRNA Plasmid (h): sc-72774-SH and cadherin-19 shRNA (h) Lentiviral Particles: sc-72774-V.

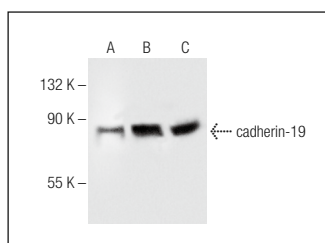
Molecular Weight of cadherin-19: 87 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, MIA PaCa-2 cell lysate: sc-2285 or SK-N-SH cell lysate: sc-2410.

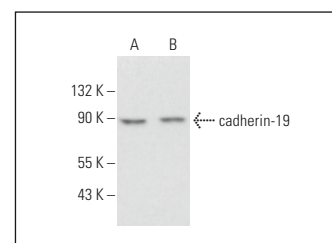
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



cadherin-19 (D-1): sc-376990. Western blot analysis of cadherin-19 expression in MIA PaCa-2 (A), IMR-32 (B) and SK-N-SH (C) whole cell lysates.



cadherin-19 (D-1): sc-376990. Western blot analysis of cadherin-19 expression in IMR-32 (A) and JAR (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Kumar, R., et al. 2016. Adult skin-derived precursor Schwann cells exhibit superior myelination and regeneration supportive properties compared to chronically denervated nerve-derived Schwann cells. *Exp. Neurol.* 278: 127-142.

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.