

E-cadherin (5H9): sc-52327

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. 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. 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.

CHROMOSOMAL LOCATION

Genetic locus: CDH1 (human) mapping to 16q22.1; Cdh1 (mouse) mapping to 8 D3.

SOURCE

E-cadherin (5H9) is a mouse monoclonal antibody raised against affinity purified 80 kDa extracellular fragments of E-cadherin derived from tryptic digestion of A-431 vulva carcinoma cells of human origin.

PRODUCT

Each vial contains 50 μg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

E-cadherin (5H9) is recommended for detection of E-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).

Suitable for use as control antibody for E-cadherin siRNA (h): sc-35242, E-cadherin siRNA (m): sc-35243, E-cadherin shRNA Plasmid (h): sc-35242-SH, E-cadherin shRNA Plasmid (m): sc-35243-SH, E-cadherin shRNA (h) Lentiviral Particles: sc-35242-V and E-cadherin shRNA (m) Lentiviral Particles: sc-35243-V.

Molecular Weight of E-cadherin precursor: 135 kDa.

Molecular Weight of mature E-cadherin: 120/80 kDa.

Positive Controls: ZR-75-1 cell lysate: sc-2241, LNCaP cell lysate: sc-2231 or MCF7 whole cell lysate: sc-2206.

RESEARCH USE

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

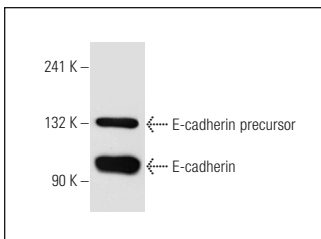
PROTOCOLS

See our web site at www.scbt.com 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



E-cadherin (5H9): sc-52327. Western blot analysis of E-cadherin expression in LNCaP whole cell lysate.

SELECT PRODUCT CITATIONS

1. Sun, Y., et al. 2014. MicroRNA-222 promotes the proliferation and migration of cervical cancer cells. *Clin. Invest. Med.* 37: E131.
2. Zhang, X., et al. 2015. Curcumin protects renal tubular epithelial cells from high glucose-induced epithelial-to-mesenchymal transition through Nrf2-mediated upregulation of Heme Oxygenase-1. *Mol. Med. Rep.* 12: 1347-1355.
3. Yu, N., et al. 2016. Melatonin attenuates TGF β 1-induced epithelial-mesenchymal transition in lung alveolar epithelial cells. *Mol. Med. Rep.* 14: 5567-5572.
4. Jiang, L., et al. 2017. TrkB promotes laryngeal cancer metastasis via activation PI3K/Akt pathway. *Oncotarget* 8: 108726-108737.
5. Liu, M., et al. 2018. Tumor-suppressing effects of microRNA-612 in bladder cancer cells by targeting malic enzyme 1 expression. *Int. J. Oncol.* 52: 1923-1933.
6. Hua, T., et al. 2018. Estrogen-related receptor γ promotes the migration and metastasis of endometrial cancer cells by targeting S100A4. *Oncol. Rep.* 40: 823-832.
7. Chen, Y., et al. 2019. Melatonin suppresses epithelial-to-mesenchymal transition in the MG-63 cell line. *Mol. Med. Rep.* 21: 1356-1364.
8. Yuan, C., et al. 2020. EMT related circular RNA expression profiles identify circSCYL2 as a novel molecule in breast tumor metastasis. *Int. J. Mol. Med.* 45: 1697-1710.
9. Troyanovsky, R.B., et al. 2021. Sorting of cadherin-catenin-associated proteins into individual clusters. *Proc. Natl. Acad. Sci. USA* 118: e2105550118.

CONJUGATES

See **E-cadherin (G-10): sc-8426** for E-cadherin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.