

E-cadherin (6F9): sc-52328

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 (6F9) 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 IgG₁ in 500 μl of 0.09% sodium azide and 1% stabilizer protein.

APPLICATIONS

E-cadherin (6F9) is recommended for detection of E-cadherin of mouse, rat and human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunoprecipitation [10-20 μl per 100-500 μg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200).

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 mature E-cadherin: 120/80 kDa.

Molecular Weight of E-cadherin precursor: 135 kDa.

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

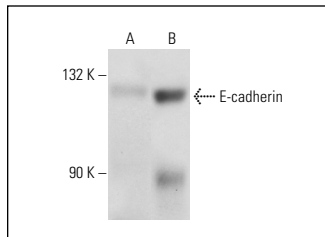
STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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

DATA



E-cadherin (6F9): sc-52328. Western blot analysis of E-cadherin expression in ZR-75-1 (A) and LNCaP (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Huang, Y., et al. 2008. Midkine induces epithelial-mesenchymal transition through Notch2/Jak2-Stat3 signaling in human keratinocytes. *Cell Cycle* 7: 1613-1622.
- Arena, S., et al. 2010. Molecular events involved in the morphogenesis of multicystic dysplastic kidney. *Urol. Int.* 85: 106-111.
- Hung, S.W., et al. 2012. Recombinant viral protein VP1 suppresses HER-2 expression and migration/metastasis of breast cancer. *Breast Cancer Res. Treat.* 136: 89-105.
- Xiao, W., et al. 2013. Knockdown of FAK inhibits the invasion and metastasis of Tca-8113 cells *in vitro*. *Mol. Med. Rep.* 8: 703-707.
- Lu, J.N., et al. 2014. The inhibitory effect of anthocyanins on Akt on invasion and epithelial-mesenchymal transition is not associated with the anti-EGFR effect of the anthocyanins. *Int. J. Oncol.* 44: 1756-1766.
- Li, W., et al. 2018. Curcumin inhibits superoxide dismutase-induced epithelial-to-mesenchymal transition via the PI3K/Akt/NF κ B pathway in pancreatic cancer cells. *Int. J. Oncol.* 52: 1593-1602.
- Li, W., et al. 2019. Curcumin attenuates hyperglycemia-driven EGF-induced invasive and migratory abilities of pancreatic cancer via suppression of the ERK and Akt pathways. *Oncol. Rep.* 41: 650-658.
- Li, W., et al. 2020. Curcumin inhibits pancreatic cancer cell invasion and EMT by interfering with tumor-stromal crosstalk under hypoxic conditions via the IL-6/ERK/NF κ B axis. *Oncol. Rep.* 44: 382-392.
- Zhang, J., et al. 2021. Circular RNA circ_0001017 sensitizes cisplatin-resistant gastric cancer cells to chemotherapy by the miR-543/PHLPP2 axis. *Biochem. Genet.* E-published.

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.