

E-cadherin (H-108): sc-7870

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 (H-108) is a rabbit polyclonal antibody raised against amino acids 600-707 mapping within an extracellular domain of E-cadherin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

E-cadherin (H-108) 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 μ g per 100-500 μ g 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).

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.

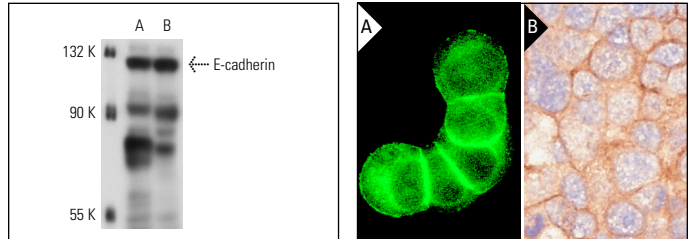
STORAGE

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.

DATA



E-cadherin (H-108): sc-7870. Western blot analysis of E-cadherin expression in ZR-75-1 (A) and LNCaP (B) whole cell lysates.

E-cadherin (H-108): sc-7870. Immunofluorescence staining of methanol-fixed ZR-75-1 cells showing membrane staining (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human ovarian tumor showing membrane staining (B).

SELECT PRODUCT CITATIONS

- Croix, B.S., et al. 2000. Genes expressed in human tumor endothelium. *Science* 289: 1197-1202.
- Sobolewska, A., et al. 2011. Role and regulation of autophagy in the development of acinar structures formed by bovine BME-UV1 mammary epithelial cells. *Eur. J. Cell Biol.* 90: 854-864.
- Walsh, S.B., et al. 2011. Cyclosporine a mediates pathogenesis of aggressive cutaneous squamous cell carcinoma by augmenting epithelial-mesenchymal transition: role of TGF β signaling pathway. *Mol. Carcinog.* 50: 516-527.
- Fragiadaki, M., et al. 2011. Interstitial fibrosis is associated with increased COL1A2 transcription in AA-injured renal tubular epithelial cells *in vivo*. *Matrix Biol.* 30: 396-403.
- Hoy, B., et al. 2012. Distinct roles of secreted HtrA proteases from gram-negative pathogens in cleaving the junctional protein and tumor suppressor E-cadherin. *J. Biol. Chem.* 287: 10115-10120.
- Boehm, M., et al. 2012. Rapid paracellular transmigration of *Campylobacter jejuni* across polarized epithelial cells without affecting TER: role of proteolytic-active HtrA cleaving E-cadherin but not fibronectin. *Gut Pathog.* 4: 3.
- Holm, R., et al. 2012. Rectal absorption of vigabatrin, a substrate of the proton coupled amino acid transporter (PAT1, Slc36a1), in rats. *Pharm. Res.* 29: 1134-1142.
- Hoy, B., et al. 2013. The stability and activity of recombinant *Helicobacter pylori* HtrA under stress conditions. *J. Basic. Microbiol.* 53: 402-409.



Try **E-cadherin (G-10): sc-8426** or **E-cadherin (67A4): sc-21791**, our highly recommended monoclonal alternatives to E-cadherin (H-108). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **E-cadherin (G-10): sc-8426**.