**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.

**SOURCE**

E-cadherin (67A4) is a mouse monoclonal antibody raised against human breast carcinoma cell line T471.

**PRODUCT**

Each vial contains 200 µg IgG\(_1\) kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

E-cadherin (67A4) is available conjugated to agarose (sc-21791 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-21791 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-21791 PE), fluorescein (sc-21791 FITC), Alexa Fluor® 488 (sc-21791 AF488), Alexa Fluor® 546 (sc-21791 AF546), Alexa Fluor® 594 (sc-21791 AF594) or Alexa Fluor® 647 (sc-21791 AF647), 200 µg/ml, for WB (RGB), IF, IHQF and FCM; and to either Alexa Fluor® 680 (sc-21791 AF680) or Alexa Fluor® 790 (sc-21791 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, E-cadherin (67A4) is available conjugated to either PerCP (sc-21791 PerCP), PerCP-Cy5.5 (sc-21791 PCPC5) or Alexa Fluor® 405 (sc-21791 AF405), 100 tests in 2 ml, for IF, IHQF and FCM.

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**APPLICATIONS**

E-cadherin (67A4) is recommended for detection of E-cadherin of 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 1:500-1:5000) and flow cytometry (1 µg per 1 x 10\(^6\) cells).

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

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

Molecular Weight of E-cadherin precipitate: 135 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, 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.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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