

E-cadherin (d-300): sc-33743

BACKGROUND

Cadherins comprise a family of Ca²⁺-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 NH₂-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.

REFERENCES

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SOURCE

E-cadherin (d-300) is a rabbit polyclonal antibody raised against amino acids 271-570 mapping within an N-terminal extracellular domain of E-cadherin of *Drosophila melanogaster* origin.

PRODUCT

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

APPLICATIONS

E-cadherin (d-300) is recommended for detection of E-cadherin of *Drosophila melanogaster* 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Molecular Weight of E-cadherin precursor: 135 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Wang, W., et al. 2011. Notch signaling regulates neuroepithelial stem cell maintenance and neuroblast formation in *Drosophila* optic lobe development. *Dev. Biol.* 350: 414-428.
- Mathew, S.J., et al. 2011. Role for Traf4 in polarizing adherens junctions as a prerequisite for efficient cell shape changes. *Mol. Cell Biol.* 31: 4978-4993.
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- Wang, W., et al. 2011. Role of JAK/STAT signaling in neuroepithelial stem cell maintenance and proliferation in the *Drosophila* optic lobe. *Biochem. Biophys. Res. Commun.* 410: 714-720.
- Zhu, X.Y., et al. 2012. Silencing of the integrin-linked kinase gene suppresses the proliferation, migration and invasion of pancreatic cancer cells (Panc-1). *Genet. Mol. Biol.* 35: 538-544.
- Zhou, L. and Luo, H. 2013. Replication protein a links cell cycle progression and the onset of neurogenesis in *Drosophila* optic lobe development. *J. Neurosci.* 33: 2873-2888.

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.