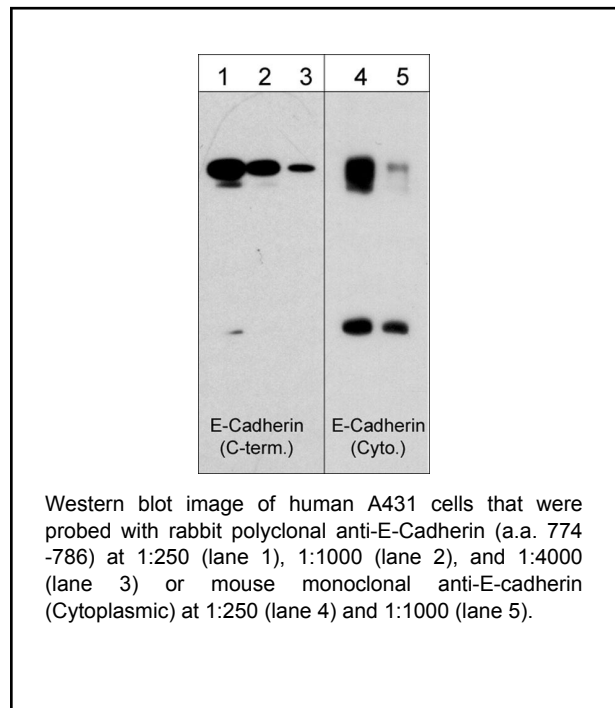


Background

Cadherins are transmembrane glycoproteins vital in calcium-dependent cell-cell adhesion during tissue differentiation. Cadherins cluster to form foci of homophilic binding units. A key determinant to the strength of the cadherin-mediated adhesion may be by the juxtamembrane region in cadherins. This region induces clustering and also binds to the protein p120 catenin. The cytoplasmic region is highly conserved in sequence and has been shown experimentally to regulate the cell-cell binding function of the extracellular domain of E-cadherin, possibly through interaction with the cytoskeleton. Many cadherins are regulated by phosphorylation, including N-cadherin and E-cadherin. N-cadherin is phosphorylated by c-Src at Tyr-820, Tyr-853, Tyr-860, Tyr-884, and Tyr-886. Phosphorylation of Tyr-860 (Tyr-835 in E-cadherin) can disrupt cadherin binding to β -catenin. Since many of these tyrosine sites are conserved in the cadherin family, phosphorylation of these sites may be critical for cadherin function.

Background References

- Takeichi, M. (1988) *Development* 102:639.
 Xu, Y. et al. (1997) *J. Biol. Chem.* 272(21):13463.
 Qi, J. et al. (2006) *Mol. Biol. Cell* 17(3):1261.



Applications

WB	1:1000
ELISA	1:2000

Species Reactivity

Hu, Rt, Ms

Specificity

This antibody was affinity purified using E-cadherin (a.a. 774-786) peptide. In western blots, the antibody detects a 120 kDa band corresponding to E-cadherin in human A431 cells, and does not detect VE-cadherin or N-Cadherin.

End user should determine optimal dilution for their particular applications and experiments.
 Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

Immunogen

Uniprot ID: P12830

E-cadherin synthetic peptide corresponding to amino acids in the C-terminal region in human E-cadherin. This sequence is conserved in rat and mouse E-cadherin, and has low homology to other cadherin family members.

Buffer and Storage

Rabbit polyclonal, affinity-purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

Related Products

- CM1681 E-Cadherin (Cytoplasmic) Mouse Monoclonal
- CK6260 E-Cadherin Phospho-Regulation Antibody Sampler Kit
- CM1701 N-Cadherin (Cytoplasmic) Mouse Monoclonal
- CP1801 N-Cadherin (Tyr-820), phospho-specific Rabbit Polyclonal
- CP1901 N-Cadherin (a.a. 853-864)|E-Cadherin (a.a. 828-839)| Rabbit

Product References

- Gu, H. et al. (2014) *FASEB Journal* 28(10):4223.
 WB: human small airway epithelial cells
- SalaheldeenE. et al. (2014) *J Histo Cytochem.* 62(9):632.
 WB: seminiferous tubules

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