

E-Cadherin (Cytoplasmic)

Cat. # CM1681

Host Mouse Monoclonal IgG1

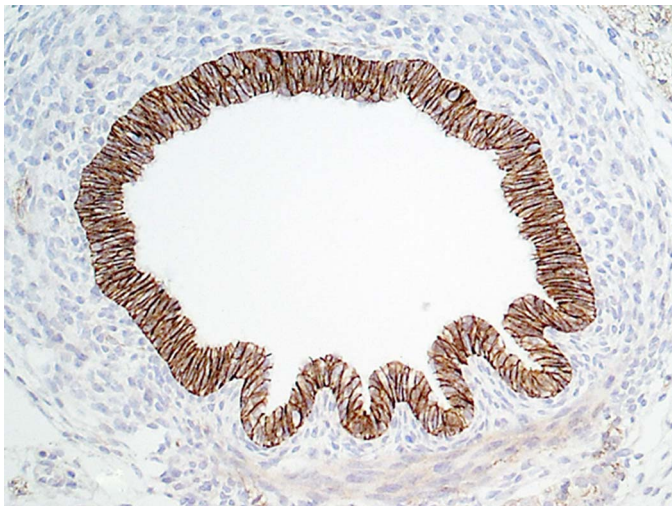
Size 100 µl

Background:

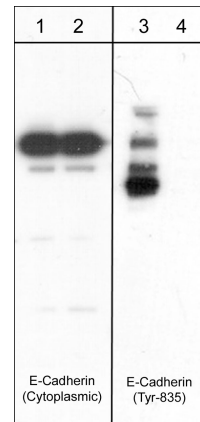
Cadherins are transmembrane glycoproteins vital in calcium-dependent cell-cell adhesion during tissue differentiation. Cadherins cluster to form foci of homophilic binding units. A key determinant to the strength of the cadherin-mediated adhesion may be by the juxtamembrane region in cadherins. This 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 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.

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



Formalin fixed, citric acid treated paraffin sections of embryonic Rat E16 intestines. Sections were probed with anti-E-Cadherin (CM1681) then anti-mouse:HRP before detection using DAB. (Images provided by Carl Hobbs and Dr. Pat Doherty at Wolfson Centre for Age-Related Diseases, King's College London).



Western blot image of human A431 cells treated with pervanadate (1 mM) for 30 min (lanes 1 & 3) then treated with alkaline phosphatase (lanes 2 & 4). Blots were probed with anti-E-Cadherin (Cytoplasmic) and anti-N-Cadherin (Tyr-860)/E-Cadherin (Tyr-835) conserved site.

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E-Cadherin (Cytoplasmic)

Cat. #	CM1681
Host	Mouse Monoclonal IgG1
Size	100 µl

Immunogen:

Clone (M168) was generated from a mouse recombinant E-Cadherin protein containing amino acids in the C-terminal region. This sequence is highly conserved in human and rat E-cadherin.

Buffer and Storage:

Mouse monoclonal antibody purified with protein A chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

Applications:

WB	1:1000	IP	1:100
ELISA	1:2000	IHC	1:50
ICC	1:250		

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 1hour at room temperature.

Specificity:

This E-cadherin antibody detects a 120 kDa* protein in human A431 cells, and does not cross-react with VE-cadherin or N-cadherin.

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

Related Products:

CP1751 N-Cadherin (a.a. 811-824) Rabbit Polyclonal
CP1901 N-Cadherin (a.a. 853-864) Rabbit Polyclonal
CM1701 N-Cadherin (Cytoplasmic) Mouse Monoclonal
CP1801 N-Cadherin (Tyr-820), phospho-specific Rabbit Polyclonal
CP1851 Unphosphorylated N-Cadherin (Tyr-820) Rabbit Polyclonal
CP1951 N-Cadherin (Tyr-860), phospho-specific [Conserved site] Rabbit

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