

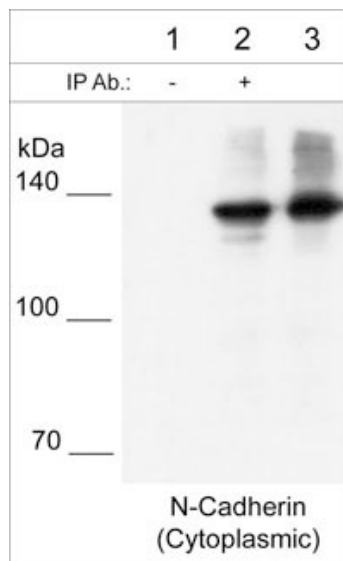
Kit Summary

The cadherin family antibody sampler kit can be used to detect the expression level of E-cadherin, N-Cadherin, and P-cadherin. The kit includes high affinity mouse monoclonal and rabbit polyclonal antibodies to examine cadherin expression levels in western blot, ELISA, immunoprecipitation, and immunocytochemistry.

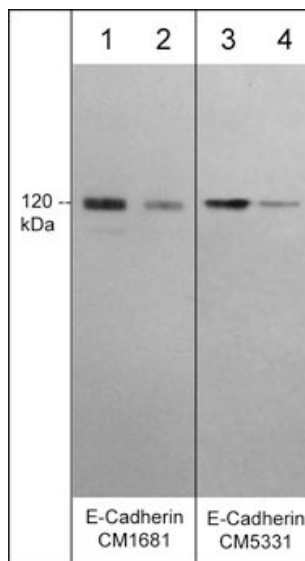
Kit Components

Cat. #	Description	Product Type	Size	Applications	Species Reactivity	WB Dilution
CM1681	E-Cadherin (Cytoplasmic)	Mouse mAb	50 µl	WB, E, IP, ICC, IHC	Hu, Rt, Ms	1:1000
CM5331	E-Cadherin (C-terminal fragment)	Mouse mAb	50 µl	WB, E	Hu, Rt, Ms	1:250
CP1921	E-Cadherin (a.a. 774-786)	Rabbit pAb	50 µl	WB, E	Hu, Rt, Ms	1:1000
CM1701	N-Cadherin (Cytoplasmic)	Mouse mAb	50 µl	WB, E, IP, ICC	Hu, Rt, Ms	1:1000
CP1751	N-Cadherin (a.a. 811-824)	Rabbit pAb	50 µl	WB, E, IP, ICC	Hu, Rt, Ms	1:1000
CM5961	P-Cadherin (N-terminal region)	Mouse mAb	50 µl	WB, E, ICC	Hu, Rt, Ms	1:1000

Applications: WB = Western blot, E = ELISA, ICC = Immunocytochemistry, IP = Immunoprecipitation, IHC = Immunohistochemistry, FC = Flow Cytometry
Species: H = Human, R = Rat, Ms = Mouse, C = Chicken, F = Fish, Fr = Frog, Rb = Rabbit



Western blot image of mouse brain lysate immunoprecipitated with no antibody (lane 1), anti-N-Cadherin (CP1751) rabbit polyclonal antibody (lane 2), and whole mouse brain lysate (lane 3). The blot was probed with anti-N-cadherin (Cytoplasmic) mouse monoclonal antibody (lanes 1-3) and detected using anti-Mouse Ig Light Chain specific:HRP secondary antibody.



Western blot image of human A431 cells (lanes 1-4). The blots were probed with mouse monoclonals anti-E-Cadherin (Cytoplasmic) at 1:1000 (lane 1) and 1:4000 (lane 2) and anti-E-Cadherin (C-terminal fragment) at 1:250 (lane 3) and 1:1000 (lane 4).

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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. P-Cadherin (Cadherin-3) is localized in placenta while E-Cadherin (Cadherin-1) and N-Cadherin (Cadherin-2) are found in epithelial and neural tissues, respectively. P-Cadherin is expressed in normal epithelial cells and some cancer cells, and its sequence contains 5 cadherin domains in the extracellular region.

Background References

- Qi, J. et al. (2006) *Mol. Biol. Cell* 17(3):1261.
Takeichi, M. (1988) *Development* 102:639.

Buffer and Storage

Rabbit polyclonal and mouse monoclonal antibodies are supplied in phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store all at -20°C . Stable for 1 year.

Product Citations

Cat. #	Citation & Application
CM1681	Pastor-Cleriguesab, A et al. (2016) <i>Curr Eye Res.</i> 41(7):890. (IHC: bovine cornea)
CM1681	Signorelli, P. et al. (2015) <i>Nutr Cancer.</i> 67(3):494. (WB: human HCT116 cells)
CM1681	Liu, D. et al. (2015) <i>Am J Pathol.</i> 185(1):110. (ICC/IHC: rat Liver epithelial cells)
CM1681	Milara, J. et al. (2015) <i>COPD.</i> 12(3):320. (ICC: human bronchial epithelial cells)
CM1681	Milara, J. et al. (2014) <i>Pulm Pharmacol Ther.</i> 28(2):138. (Protein Array: human bronchial endothelial cells)
CM1681	Milara, J. et al. (2013) <i>Thorax.</i> 68(5):410-20. (IF: human pulmonary tissue)
CM1681	Vittal, R. et al. (2013) <i>AJP Lung Cell Mol Phys</i> 304(6):401. (WB: rat & human Epithelial Cells)
CP1921	Gu, H. et al. (2014) <i>FASEB Journal</i> 28(10):4223. (WB: human small airway epithelial cells)
CP1921	SalaheldeenE. et al. (2014) <i>J Histo Cytochem.</i> 62(9):632. (WB: seminiferous tubules)
CM1701	Wang, T. et al. (2011) <i>J Cell Physiol</i> 226:2063. (WB,ICC: rat PC12 cells)
CP1751	Chang, Y.J. et al. (2014) <i>Mol Cell Biol.</i> 34(6):1003 (WB: PC12-SH2B1 β cell)

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