E Cadherin Rabbit monoclonal antibody

Catalog: MB66250 Host: Rabbit Reactivity: Human

BackGround:

Cadherins are a superfamily of transmembrane glycoproteins that contain cadherin repeats of approximately 100 residues in their extracellular domain. Cadherins mediate calcium-dependent cell-cell adhesion and play critical roles in normal tissue development. The classic cadherin subfamily includes N-, P-, R-, B-, and E-cadherins, as well as about ten other members that are found in adherens junctions, a cellular structure near the apical surface of polarized epithelial cells. The cytoplasmic domain of classical cadherins interacts with β-catenin, γ-catenin (also called plakoglobin), and p120 catenin. β-catenin and γ-catenin associate with α-catenin, which links the cadherin-catenin complex to the actin cytoskeleton. While β- and γ-catenin play structural roles in the junctional complex, p120 regulates cadherin adhesive activity and trafficking. Investigators consider E-cadherin an active suppressor of invasion and growth of many epithelial cancers. Research studies indicate that cancer cells have upregulated N-cadherin in addition to loss of E-cadherin. This change in cadherin expression is called the "cadherin switch." N-cadherin cooperates with the FGF receptor, leading to overexpression of MMP-9 and cellular invasion. Research studies have shown that in endothelial cells, VE-cadherin signaling, expression, and localization correlate with vascular permeability and tumor angiogenesis. Investigators have also demonstrated that expression of P-cadherin, which is normally present in epithelial cells, is also altered in ovarian and other human cancers.

Product:

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

Molecular Weight:

~ 135 kDa

Swiss-Prot:

P12830

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000), IHC (1/50 - 1/100), IF/ICC (1/50 - 1/100), IP (1/10 - 1/50)

Storage&Stability:

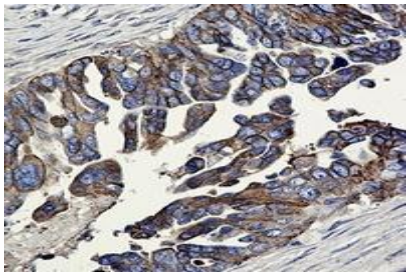
Store at 4℃ short term. Aliquot and store at -20℃ long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of E Cadherin protein.

DATA:

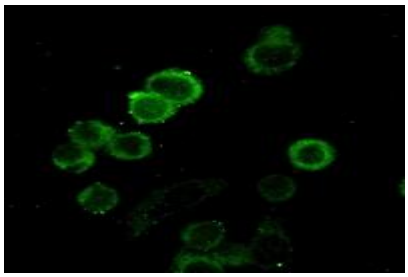
Western blot analysis of E Cadherin expression in PC3 (A) whole cell lysates.



Immunohistochemical analysis of E Cadherin staining in human cholangiocarcinoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.36). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Bioworld Technology, Inc.
Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416,USA.
Email: info@bioworlde.com
Tel: 6123263284
Fax: 6122933841

Bioworld technology, co. Ltd.
Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.
Email: info@biogot.com
Tel: 0086-025-68037686
Fax: 0086-025-68035151



Immunofluorescent analysis of E Cadherin staining in MCF7 cells.

Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 ℃ in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated sec-ondary antibody (green) in PBS at room temperature in the dark.

Note:

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

Bioworld Technology, Inc.
Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416,USA.
Email: info@bioworlde.com
Tel: 6123263284
Fax: 6122933841

Bioworld technology, co. Ltd.
Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.
Email: info@biogot.com
Tel: 0086-025-68037686
Fax: 0086-025-68035151