Anti-E-Cadherin Antibody [3-F9]

M1405-3

Product Type:	Mouse monoclonal IgG2b, primary antibodies
Species reactivity:	Human, Mouse
Applications:	IHC-P
Molecular Wt:	~130kDa
Clone number:	3-F9

Description: E-cadherin (epithelial) is the most well-studied member of the cadherin family. It consists of 5 cadherin repeats (EC1 ~ EC5) in the extracellular domain, one transmembrane domain, and an intracellular domain that binds p120-catenin and beta-catenin. The intracellular domain contains a highly-phosphorylated region vital to beta-catenin binding and, therefore, to E-cadherin function. Loss of E-cadherin function or expression has been implicated in cancer progression and metastasis. E-cadherin downregulation decreases the strength of cellular adhesion within a tissue, resulting in an increase in cellular motility. This in turn may allow cancer cells to cross the basement membrane and invade surrounding tissues. E-cadherin is also used by pathologists to diagnose different kinds of breast cancer.

Immunogen: Recombinant protein within mouse E-Cadherin aa 350-550.

Positive control: Human liver tissue, mouse liver tissue.

Subcellular location: Cell membrane

Database links: SwissProt: P12830 Human | P09803 Mouse

Recommended Dilutions:

IHC-P	1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein G affinity purified.

Images

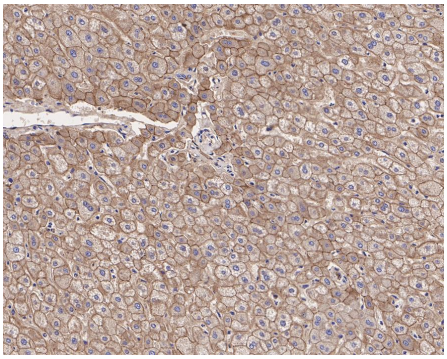

Fig1: Immunohistochemical analysis of paraffin-embedded human liver tissue with Mouse anti-E-Cadherin antibody (M1405-3) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (M1405-3) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

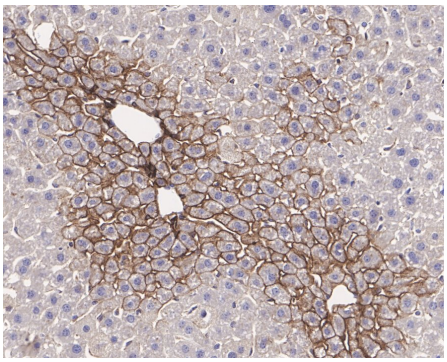

Fig2: Immunohistochemical analysis of paraffin-embedded mouse liver tissue with Mouse anti-E-Cadherin antibody (M1405-3) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (M1405-3) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Eger A, et al. (Mar 2005). "DeltaEF1 is a transcriptional repressor of E-cadherin and regulates epithelial plasticity in breast cancer cells." Oncogene 24 (14): 2375–85.
2. Liu YN, et al. (Dec 2005). "Regulatory mechanisms controlling human E-cadherin gene expression.". Oncogene 24 (56): 8277–90.
3. Lombaerts M, et al. (Mar 2006). "E-cadherin transcriptional downregulation by promoter methylation but not mutation is related to epithelial-to-mesenchymal transition in breast cancer cell lines." Br J Cancer 94 (5): 661–71.