Mouse anti-E-Cadherin (BLAb-5D1), #MM-0095-TUT

**DATASHEET**

**Product name:** Human E-Cadherin antibody

**Background information:** The cadherins are a family of homophilic cell adhesion proteins that are expressed in a variety of tissues. The extracellular regions of these proteins consist of five tandemly repeated domains that require Ca\(^{2+}\) binding for their adhesiveness, rigidity and stability. E-cadherin is the predominant cadherin family member that is expressed in epithelial tissue. It is generally localized on the lateral surfaces of epithelial cells in a region of cell–cell contact that is known as the adherent junction. On the cytoplasmic side of the membrane, a bundle of actin filaments runs parallel to the adherent junction. The actin filaments are linked to the E-cadherin molecules via a protein complex that contains the catenin family of proteins. Poorly differentiated tumors lack defined cell architecture and can infiltrate into the surrounding stroma as single cells or as small clusters of cells. E-cadherin expression is downregulated in a variety of malignant carcinomas. Furthermore, downregulation of E-cadherin correlates with increased tumor invasion, metastasis and poor prognosis. The correlation between E-cadherin downregulation and metastasis might be related not only to the ability of the E-cadherin-negative cell to invade surrounding tissue but also to the increased likelihood of weakly adherent cells detaching from the tumour mass in response to low shear forces, such as those found in lymphatic vessels and venules. The antibody was raised against a recombinant fragment of Human E-cadherin cytoplasmic domain.

**Format:** 100 \(\mu\)g of purified antibody. 100 \(\mu\)g/ml of purified antibody diluted in PBS. Solution contains 0.05% sodium azide as preservative.

**Species:** Mouse

**Clonality:** Monoclonal

**Isotype:** IgG1

**Reactivity / specificity:** The antibody recognizes the cytoplasmic domain of Human E-cadherin. Specific for: human, mouse and rat; other species not tested.

**Applications:** Elisa (E), Western Blot (WB), Immunoprecipitation (IP), Immunohistochemistry on paraffin embedded sections (IHC).

**Recommended starting dilutions:** WB: 1/10; IP: 5 \(\mu\)g of antibody are sufficient to precipitate the antigen from 5x10\(^6\) cells. Optimal dilution has to be determined by the user.

**Storage:** The antibody can be stored frozen at -20°C in small aliquots.

**Stability:** Minimum 1 year from reception date.

**References:**


**Limitations:** This product is to be used for *in vitro* research purposes only.