Anti-E Cadherin Antibody

0407-25



Product Type: Rabbit polyclonal IgG, primary antibodies

Species reactivity: Human, Mouse
Applications: WB, IF-Cell, FC

Molecular Wt: Predicted band size: 97 kDa

Description: Cadherin-1 or Epithelial cadherin (E-cadherin), (not to be confused with the APC/C activator

protein CDH1) is a protein that in humans is encoded by the CDH1 gene. Mutations are correlated with gastric, breast, colorectal, thyroid, and ovarian cancers. CDH1 has also been designated as CD324 (cluster of differentiation 324). It is a tumor suppressor gene. Cadherin-1 is a classical member of the cadherin superfamily. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein composed of five extracellular cadherin repeats, a transmembrane region, and a highly conserved cytoplasmic tail. Mutations in this gene are correlated with gastric, breast, colorectal, thyroid, and ovarian cancers. Loss of function is thought to contribute to progression in cancer by increasing proliferation, invasion, and/or metastasis. The ectodomain of this protein mediates bacterial adhesion to mammalian cells, and the cytoplasmic domain is required for internalization. Identified transcript variants arise from mutation at consensus splice sites. 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.

Immunogen: Synthetic peptide within mouse E-Cadherin aa 595-644 / 882.

Positive control: HCT116, SKOV-3, Hela.

Subcellular location: Cell membrane.

Database links: SwissProt: P12830 Human | P09803 Mouse

Recommended Dilutions:

WB 1:500 IF-Cell 1:50-1:200 FC 1:50-1:100

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

Storage Instruction: Store at $+4^{\circ}$ C after thawing. Aliquot store at -20° C. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.



Technical: 0086-571-89986345

Service mail:support@huabio.cn



Images

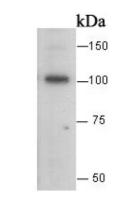


Fig1: Western blot analysis of E Cadherin on A431 cell lysate. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody was used at a 1:500 dilution in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

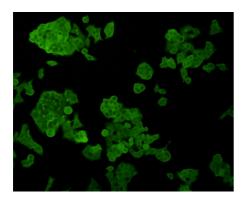


Fig2: ICC staining E Cadherin in HCT116 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the antibody (0407-25) at a dilution of 1:200 for 1 hour at room temperature, washed with PBS. Alexa Fluorc[™] 488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/100 dilution.

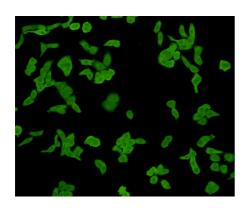


Fig3: ICC staining E Cadherin in SKOV-3 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the antibody (0407-25) at a dilution of 1:200 for 1 hour at room temperature, washed with PBS. Alexa Fluorc™ 488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/100 dilution.

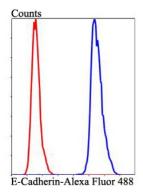


Fig4: Flow cytometric analysis of E Cadherin was done on Hela cells. The cells were fixed, permeabilized and stained with E Cadherin antibody at 1/100 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). After incubation of the primary antibody on room temperature for an hour, the cells was stained with a Alexa Fluor™ 488-conjugated goat anti-rabbit IgG Secondary antibody at 1/500 dilution for 30 minutes.

光学安生物 H U A B L O www.huabio.cn Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Meigs T.E et al. Galpha12 and Galpha13 negatively regulate the adhesive functions of cadherin. J Biol Chem 277:24594-24600 (2002).
- 2. Agiostratidou G et al. The cytoplasmic sequence of E-cadherin promotes non-amyloidogenic degradation of A beta precursors. J Neurochem 96:1182-1188 (2006).