iFluor™ 488 Conjugated Anti-E-Cadherin Antibody [SY0287]

HA720159F

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	IF-Cell, FC
Molecular Wt:	Predicted band size: 97 kDa
Clone number:	SY0287

Description: Cadherins comprise a family of Ca2+-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. Members of this family of adhesion proteins include rat cadherin K (and its human homolog, cadherin-6), R-cadherin, B-cadherin, E/P cadherin and cadherin-5. The classical cadherins, E-, N- and P-cadherin, consist of large extracellular domains characterized by a series of five homologous NH2 terminal repeats. The most distal of these cadherins is thought to be responsible for binding specificity, transmembrane domains and carboxy terminal intracellular domains. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as β-catenin, to regulate cadherin function.

Conjugate: iFluor™ 488, Ex: 491nm; Em: 516nm.

Immunogen: Synthetic peptide within Human E-Cadherin aa 591-640 / 882.

Positive control: MCF-7, A431.

Subcellular location: Endosome, Cell membrane, trans-Golgi network, adherens junction.

Database links: SwissProt: P12830 Human

Recommended Dilutions:

IF-Cell	1:100
FC	1:50-1:1,000

Storage Buffer: Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

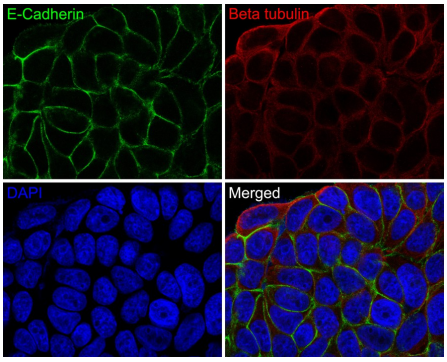

Fig1: Immunocytochemistry analysis of MCF-7 cells labeling E-Cadherin with Rabbit anti-E-Cadherin antibody (HA720159F) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes, and then blocked with 2% normal goat serum for 1 hour at 37 ℃. Cells were then incubated with Rabbit anti-E-Cadherin antibody (HA720159F) at 1/100 dilution in 2% normal goat serum overnight at 4 ℃. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/200 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) were used as the secondary antibody at 1/800 dilution.

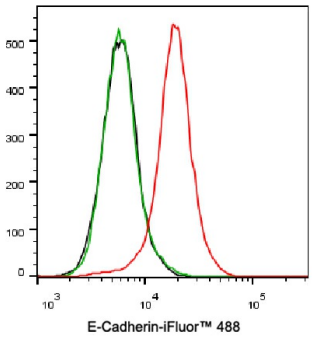

Fig2: Flow cytometric analysis of A431 cells labeling E-Cadherin.

Cells were washed twice with cold PBS and resuspend. Then incubated for 30 minutes at +4℃ with E-Cadherin (HA720159F, red, 1ug/ml) and Rabbit IgG Isotype Control (iFluor™ 488, green, 1ug/ml). Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

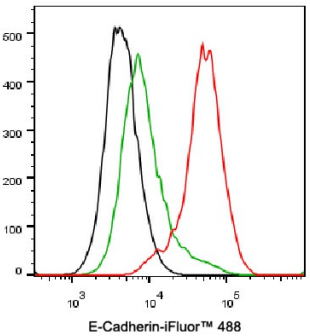

Fig3: Flow cytometric analysis of MCF-7 cells labeling E-Cadherin.

Cells were washed twice with cold PBS and resuspend. Then incubated for 30 minutes at +4℃ with E-Cadherin (HA720159F, red, 10ug/ml) and Rabbit IgG Isotype Control (iFluor™ 488, green, 10ug/ml). Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

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

Background References

1. Su B et al. Diallyl disulfide suppresses epithelial-mesenchymal transition, invasion and proliferation by downregulation of LIMK1 in gastric cancer. Oncotarget 7:10498-512 (2016).
2. Schmidt TP et al. Identification of E-cadherin signature motifs functioning as cleavage sites for Helicobacter pylori HtrA. Sci Rep 6:23264 (2016).