www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

PRODUCT DATASHEET

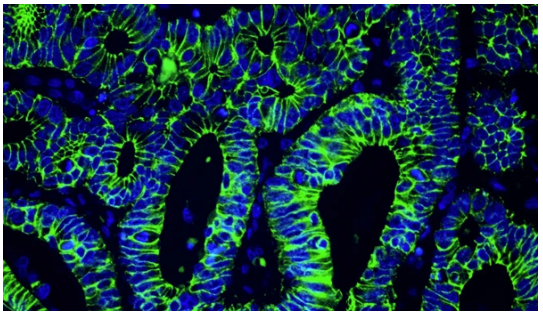
Anti-E-Cadherin (Cytoplasmic) Recombinant Chicken Chimeric mAb

Product Details

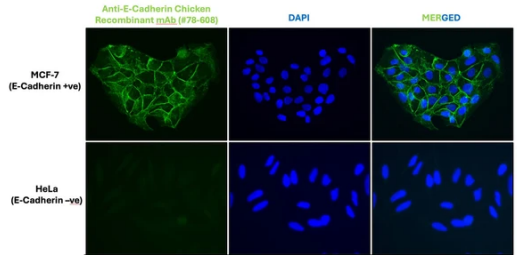
Available Variants	100 µL (SKU:78-608) 20 µL (SKU:78-608-020)
Conjugate	Unconjugated
Isotype	IgY
Clone	M168
Gene Name	CDH1
Host Species	Chicken
Concentration	1 mg/mL
Format	Purified by affinity chromatography
Physical State	Liquid
Buffer	1X PBS, 0.05% Sodium Azide pH 7.4
Production Notes	This recombinant antibody is a chimeric antibody created by replacing the mouse heavy and light constant regions of clone M168 with chicken IgY heavy and light constant regions. As such this antibody retains the same binding performance as the original clone M168 but can be detected using standard anti-chicken secondary antibodies allowing flexibility for multiplexing applications. This antibody is expressed recombinantly in mammalian cells and then affinity purified from the cell culture media.
Applications	ICC, IHC, IP, WB
Dilution Ranges	WB: 1:1000-1:3000 IHC: 1:250-1:500 ICC: 1:250-1:1000 IP: 1:100
Species Reactivity	Human, Mouse, Rat

Immunogen	Clone (M168) was generated from a mouse recombinant E-Cadherin protein containing amino acids in the cytoplasmic region. This sequence is highly conserved in human and rat E-cadherin.
Specificity	Cross-reacts with GFAP-R416W and other GFAP mutant proteins. Does not cross-react with other proteins (based on KO validation results).
Molecular Weight	120 kDa
Quality Control	Each new lot of antibody is quality control tested by Western blot on MCF-7 cell lysates and confirmed to stain the expected molecular weight band.
Storage	Aliquot and store at ≤ -20°C for long term storage. For short term storage, store at 2-8°C. For maximum recovery of product, centrifuge the vial prior to removing the cap.
UniProt ID	P09803 UniProt Summary: Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH1 is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells. Promotes organization of radial actin fiber structure and cellular response to contractile forces, via its interaction with AMOTL2 which facilitates anchoring of radial actin fibers to CDH1 junction complexes at the cell membrane. Plays a role in the early stages of desmosome cell-cell junction formation via facilitating the recruitment of DSG2 and DSP to desmosome plaques. Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7.
Country of Origin	United States
Shipping	Shipped on ice packs
Expiration	24 months from date of receipt
Usage Statement	These antibodies are to be used as research laboratory reagents and are not for use as diagnostic or therapeutic reagents in humans.
NCBI Gene ID	12550

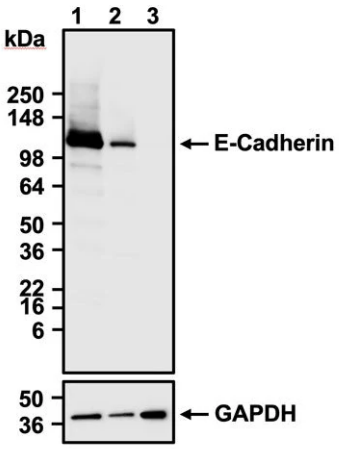
Product Images



Immunofluorescent staining for detection of cytoskeleton in human colon cancer tissue using Aves Labs anti-E-Cadherin chicken recombinant monoclonal antibody (Cat No. 78-608) at 1:1000 dilution. This section of formalin fixed, paraffin embedded colon cancer tissue was blocked with Immuno Protein Blocking Solution with 5% Goat Serum (AR-6591-04). After washing with TBST, the tissue was stained using goat anti-chicken IgY FITC conjugated secondary antibody (Cat No. 80-1000-FITC) (green). The tissue was mounted with Antibodies Incorporated Fluoroshield with DAPI and DABCO mounting medium (Cat No. AR-6505). DAPI nuclear stain (blue) shows cell nuclei. Magnification 400X.



Immunofluorescent staining of MCF-7 and HeLa cells using Aves Labs anti-E-Cadherin (Cytoplasmic) chicken recombinant antibody [M168](Cat No. 78-608). The cells were fixed with 3% paraformaldehyde, washed with PBS, and blocked/permeabilized with 5% non-fat milk powder in PBST. The anti-E-Cadherin antibody (Cat. 78-608) was incubated with the sample at a dilution of 1:1000 (1 ug/mL) at 4C overnight. After washing with PBST, the cells were stained using goat anti-chicken IgY CF488 secondary antibody (Cat No. 80-1001-488) (green). The cells were mounted with Antibodies Incorporated Fluoroshield with DAPI mounting medium (Cat No. AR-6501). DAPI nuclear stain (blue) shows cell nuclei. The staining revealed the characteristic membranous localization of E-Cadherin in MCF-7 cells, with no staining observed in E-Cadherin negative HeLa cells.



Western blot detection of E-Cadherin in MCF-7 (lane 1), HepG2 (lane 2) and HeLa (lane 3) cell lysates using Aves Labs anti-E-Cadherin (Cytoplasmic) chicken recombinant antibody [M168](Cat No. 78-608). 4-20% Tris-Glycine gel was loaded with 20 ug of MCF-7, HepG2 and HeLa cell lysates. Proteins were transferred to PVDF membrane and blocked with 5% non-fat milk powder. Anti-E-Cadherin chicken antibody was incubated with the membrane at a concentration of 1:1000 (1 ug/ml) and then detected via chemiluminescence (30 seconds) using a goat anti-Chicken H+L, HRP conjugated secondary antibody. The anti-E-Cadherin chicken recombinant antibody specifically detected endogenous E-Cadherin in E-Cadherin-positive MCF-7 and HepG2 cell lysates, but not in E-Cadherin-negative HeLa cell lysates, at the expected molecular weight of ~120 kDa. GAPDH was used as a loading control.