

Anti-E Cadherin [19A11] Standard Size Ab03204-201.4

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric dog antibody was made using the variable domain sequences of the original Rat IgG2b format for improved compatibility with existing reagents assays and techniques.

Isotype and Format: Dog IgG2 (IgG-B), Fc Silent™, Kappa

Clone Number: 19A11

Alternative Name(s) of Target: CD324; Cadherin-1; Cadherin E; E-Cadherin; epithelial cadherin; CAM 120/80; Uvomorulin

UniProt Accession Number of Target Protein: P12830

Published Application(s): agonist, WB, ELISA, FC

Published Species Reactivity: Dog, Human

Immunogen: The original antibody was generated by immunizing mice with purified ECad1-5 protein.

Specificity: This antibody recognizes the N-terminal extracellular cadherin repeat domain 1 (EC1) of the human E-cadherin. This antibody also cross reacts with canine E-cadherin. Cadherins are calcium-dependent cell adhesion proteins. It is localized on the surfaces of epithelial cells in regions of cell-cell contact known as adherens junctions. E-cadherins are reported to play an important role in cancer metastasis.

Application Notes: The initial screening of E-Cadherin-positive hybridoma supernatants for binding to live Colo 205 cells was done using an ELISA. Activating antibody 19A11 stimulated the adhesion of Colo 205 cells to pure E-cadherin substrate (PMID: 22513089). This antibody is also capable of recognizing denature human E-cadherin in a western blot. This antibody also inhibited the formation of epithelial tubules, causing the cells to remain as round epithelial cysts. This antibody also enhanced the adhesion of HGF-treated MDCK cells to E-cadherin when analyzed with the flow adhesion assay (PMID: 22513089). This antibody slowed the rate of wound closure in both normal culture medium and HGF-treated cultures (PMID: 22513089). This antibody is an E-cadherin activating antibody which stimulates the apoptosis of circulating tumor cells (PMID: 32127478). This antibody was used in determination of expression of E-cadherin on low-adherent Colo205 cells using flow cytometry (PMID: 27582386).

Antibody First Published in: Petrova et al. Conformational epitopes at cadherin calcium-binding sites and p120-catenin phosphorylation regulate cell adhesion. Mol Biol Cell. 2012 Jun 1; 23(11): 2092-2108.

[PMID:22513089](#)

Note on publication: The paper investigated the change in cadherin structure at the cell surface that regulate its adhesive activity.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.