# abcam

#### Product datasheet

## Anti-E Cadherin antibody [rCDH1/1525] ab238099

リコンピナント

10 References 画像数 4

製品の概要

製品名 Anti-E Cadherin antibody [rCDH1/1525]

製品の詳細 Mouse monoclonal [rCDH1/1525] to E Cadherin

由来種 Mouse

アプリケーション 適用あり: WB, Protein Array, IHC-P

種交差性 交差種: Human

非交差種: Mouse, Rat

免疫原 Recombinant full length protein corresponding to Human E Cadherin.

Database link: P12830

ポジティブ・コントロール IHC-P: Human colon carcinoma tissue. WB: MCF7 cell lysate.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

**バッファー** pH: 7.2

Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA

精製度 Protein A/G purified

特記事項(精製) Purified from bioreactor concentrate.

**ポリ/モノ** モノクローナル **クローン名** rCDH1/1525

アイソタイプ lgG1 軽鎖の種類 kappa

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab238099の使用に適用されます

#### アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 97 kDa.
Protein Array		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 - 2 $\mu$ g/ml. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0 for 10-20 min followed by cooling at RT for 20 minutes. Incubate with primary antibody for 30 minutes at RT.

#### ターゲット情報

#### 機能

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. Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7.

E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production.

### 組織特異性

#### 関連疾患

Non-neural epithelial tissues.

Defects in CDH1 are the cause of hereditary diffuse gastric cancer (HDGC) [MIM:137215]. An autosomal dominant cancer predisposition syndrome with increased susceptibility to diffuse gastric cancer. Diffuse gastric cancer is a malignant disease characterized by poorly differentiated infiltrating lesions resulting in thickening of the stomach. Malignant tumors start in the stomach, can spread to the esophagus or the small intestine, and can extend through the stomach wall to nearby lymph nodes and organs. It also can metastasize to other parts of the body. Note=Heterozygous germline mutations CDH1 are responsible for familial cases of diffuse gastric cancer. Somatic mutations in the has also been found in patients with sporadic diffuse gastric cancer and lobular breast cancer.

Defects in CDH1 are a cause of susceptibility to endometrial cancer (ENDMC) [MIM:608089]. Defects in CDH1 are a cause of susceptibility to ovarian cancer (OC) [MIM:167000]. Ovarian cancer common malignancy originating from ovarian tissue. Although many histologic types of ovarian neoplasms have been described, epithelial ovarian carcinoma is the most common form. Ovarian cancers are often asymptomatic and the recognized signs and symptoms, even of latestage disease, are vague. Consequently, most patients are diagnosed with advanced disease.

#### Contains 5 cadherin domains.

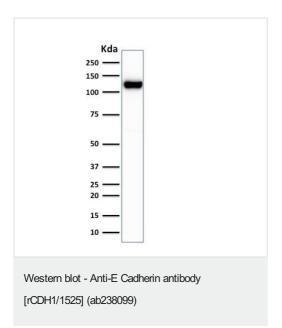
## 配列類似性 翻訳後修飾

During apoptosis or with calcium influx, cleaved by a membrane-bound metalloproteinase (ADAM10), PS1/gamma-secretase and caspase-3 to produce fragments of about 38 kDa (E-CAD/CTF1), 33 kDa (E-CAD/CTF2) and 29 kDa (E-CAD/CTF3), respectively. Processing by the metalloproteinase, induced by calcium influx, causes disruption of cell-cell adhesion and the subsequent release of beta-catenin into the cytoplasm. The residual membrane-tethered cleavage product is rapidly degraded via an intracellular proteolytic pathway. Cleavage by caspase-3 releases the cytoplasmic tail resulting in disintegration of the actin microfilament system. The gamma-secretase-mediated cleavage promotes disassembly of adherens junctions.

#### 細胞内局在

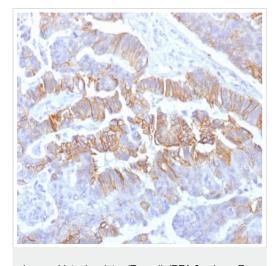
Cell junction. Cell membrane. Endosome. Golgi apparatus > trans-Golgi network. Colocalizes with DLGAP5 at sites of cell-cell contact in intestinal epithelial cells. Anchored to actin microfilaments through association with alpha-, beta- and gamma-catenin. Sequential proteolysis induced by apoptosis or calcium influx, results in translocation from sites of cell-cell contact to the cytoplasm. Colocalizes with RAB11A endosomes during its transport from the Golgi apparatus to the plasma membrane.

#### 画像



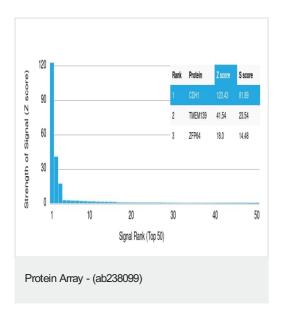
Anti-E Cadherin antibody [rCDH1/1525] (ab238099) at 1 µg/ml + MCF7 (human breast adenocarcinoma cell line) cell lysate

Predicted band size: 97 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody
[CDH1] (ab238099)

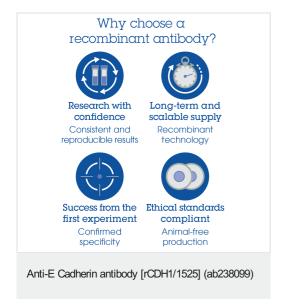
Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for E Cadherin with ab238099 at 2  $\mu$ g/ml in immunohistochemical analysis.



ab238099 was tested in protein array against over 19000 different full-length human proteins.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



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