# abcam

### Product datasheet

## Anti-E Cadherin antibody [EPR16845-34] ab212059

יעלאעבע RabMAb

10 References 画像数4

製品の概要

製品名 Anti-E Cadherin antibody [EPR16845-34]

製品の詳細 Rabbit monoclonal [EPR16845-34] to E Cadherin

由来種 Rabbit

特異性 E-cadherin contains a number of cleavage sites which may yield a complex fragmentation pattern

in WB. Multiple bands between ~80-120 kDa may be observed.

アプリケーション **適用あり:** IP, WB

種交差性 交差種: Mouse, Rat

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Mouse E-Cadherin active protein (aa1-709); Rat spleen lysate; Rat serum; Mouse plasma

and serum; Mouse brain lysate. IP: Mouse serum.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

製品の特性

製品の状態

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: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル

クローン名

EPR16845-34

アイソタイプ

lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab212059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
IP		1/40.
WB		1/1000. Detects a band of approximately 80-120 kDa (predicted molecular weight: 98 kDa).

#### 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 late-stage disease, are vague. Consequently, most patients are diagnosed with advanced disease.

#### Contains 5 cadherin domains.

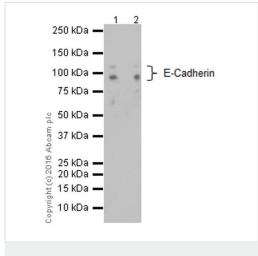
# 配列類似性 翻訳後修飾

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

#### 細胞内局在

system. The gamma-secretase-mediated cleavage promotes disassembly of adherens junctions. 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



Western blot - Anti-E Cadherin antibody [EPR16845-34] (ab212059)

**Lane 1 :** Anti-E Cadherin antibody [EPR16845-34] (ab212059) at 1/20000 dilution

Lane 2: Anti-E Cadherin antibody [EPR16845-34] (ab212059) at 1/100000 dilution

All lanes: Mouse E-Cadherin active protein (aa1-709)

Lysates/proteins at 0.01  $\mu g$  per lane.

#### Secondary

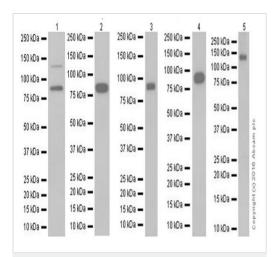
All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

dilution

**Predicted band size:** 98 kDa **Observed band size:** 120,84 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-E Cadherin antibody [EPR16845-34] (ab212059)

Lanes 1-2: Anti-E Cadherin antibody [EPR16845-34] (ab212059) at 1/5000 dilution

Lanes 3-5: Anti-E Cadherin antibody [EPR16845-34] (ab212059) at 1/1000 dilution

Lane 1: Rat spleen lysate

Lane 2: Rat serum

Lane 3: Mouse plasma

Lane 4: Mouse serum

Lane 5: Mouse brain lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

Lanes 1 & 5 : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

**Lanes 2-4:** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 98 kDa

Observed band size: 120,84 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/4/5: 30 seconds; Lane 2: 3 minutes; Lane 3: 15 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID: 11076937; 11953314).

E Cadherin was immunoprecipitated from 1 mg of mouse serum with ab212059 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab212059 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10,000 dilution

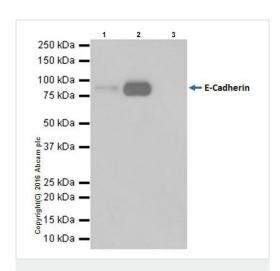
Lane 1: Mouse serum 10 µg (Input).

Lane 2: ab212059 IP in mouse serum.

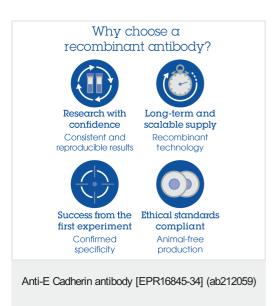
Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab212059 in mouse serum.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.



Immunoprecipitation - Anti-E Cadherin antibody [EPR16845-34] (ab212059)



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors