abcam

Product datasheet

# Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] ab75777

リコンビナント RabMAb

15 References 画像数 6

## 製品の概要

| | |
|---|---|
| **製品名** | Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] |
| **製品の詳細** | Rabbit monoclonal [EP742(2)Y] to beta Catenin (phospho S37) |
| **由来種** | Rabbit |
| **特異性** | *Stimulation may be required to allowdetection of the phosphorylated protein. Please see images belowfor recommended treatment conditions and positive controls.* |
| **アプリケーション** | **適用あり:** WB, Dot blot<br>**適用なし:** Flow Cyt,ICC/IF,IHC-P or IP |
| **種交差性** | **交差種:** Mouse, Rat, Human |
| **免疫原** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **ポジティブ・コントロール** | 293T cell lysates, untreated or treated with calyculin A. |
| **特記事項** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.<br>Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information. |

## 製品の特性

| | |
|---|---|
| **製品の状態** | Liquid |
| **保存方法** | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |
| **バッファー** | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant |

| | |
|---|---|
| **精製度** | Protein A purified |
| **ポリ/モノ** | モノクローナル |
| **クローン名** | EP742(2)Y |
| **アイソタイプ** | IgG |

## 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ab75777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** | | 1/1000. Detects a band of approximately 100 kDa (predicted molecular weight: 85 kDa). |
| **Dot blot** | | 1/1000. |

**追加情報** Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

## ターゲット情報

**機能** Key dowstream component of the canonical Wnt signaling pathway. In the absence of Wnt, forms a complex with AXIN1, AXIN2, APC, CSNK1A1 and GSK3B that promotes phosphorylation on N-terminal Ser and Thr residues and ubiquitination of CTNNB1 via BTRC and its subsequent degradation by the proteasome. In the presence of Wnt ligand, CTNNB1 is not ubiquitinated and accumulates in the nucleus, where it acts as a coactivator for transcription factors of the TCF/LEF family, leading to activate Wnt responsive genes.
Involved in the regulation of cell adhesion. The majority of beta-catenin is localized to the cell membrane and is part of E-cadherin/catenin adhesion complexes which are proposed to couple cadherins to the actin cytoskeleton.

**組織特異性** Expressed in several hair follicle cell types: basal and peripheral matrix cells, and cells of the outer and inner root sheaths. Expressed in colon.

**関連疾患** Defects in CTNNB1 are associated with colorectal cancer (CRC) [MIM:114500].
Note=Activating mutations in CTNNB1 have oncogenic activity resulting in tumor development. Somatic mutations are found in various tumor types, including colon cancers, ovarian and prostate carcinomas, hepatoblastoma (HB), hepatocellular carcinoma (HCC). HBs are malignant embryonal tumors mainly affecting young children in the first three years of life.
Defects in CTNNB1 are a cause of pilomatrixoma (PTR) [MIM:132600]; a common benign skin tumor.
Defects in CTNNB1 are a cause of medulloblastoma (MDB) [MIM:155255]. MDB is a malignant, invasive embryonal tumor of the cerebellum with a preferential manifestation in children.
Defects in CTNNB1 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.
Note=A chromosomal aberration involving CTNNB1 is found in salivary gland pleiomorphic adenomas, the most common benign epithelial tumors of the salivary gland. Translocation t(3;8)

(p21;q12) with PLAG1.

**配列類似性**

Belongs to the beta-catenin family.
Contains 12 ARM repeats.

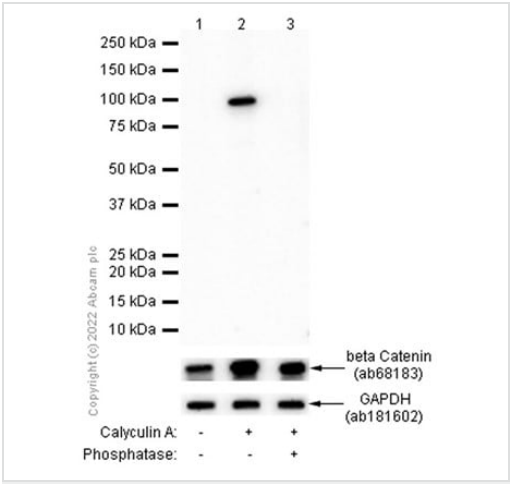
**翻訳後修飾**

Phosphorylation by GSK3B requires prior phosphorylation of Ser-45 by another kinase. Phosphorylation proceeds then from Thr-41 to Ser-37 and Ser-33.
EGF stimulates tyrosine phosphorylation. Phosphorylation on Tyr-654 decreases CDH1 binding and enhances TBP binding.
Ubiquitinated by the SCF(BTRC) E3 ligase complex when phosphorylated by GSK3B, leading to its degradation. Ubiquitinated by a E3 ubiquitin ligase complex containing UBE2D1, SIAH1, CACYBP/SIP, SKP1, APC and TBL1X, leading to its subsequent proteasomal degradation.

**細胞内局在**

Cytoplasm. Nucleus. Cytoplasm > cytoskeleton. Cell junction > adherens junction. Cell junction. Cell membrane. Cytoplasmic when it is unstabilized (high level of phosphorylation) or bound to CDH1. Translocates to the nucleus when it is stabilized (low level of phosphorylation). Interaction with GLIS2 and MUC1 promotes nuclear translocation. Interaction with EMD inhibits nuclear localization.

## 画像




Western blot - Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777)

**All lanes :** Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777) at 1/1000 dilution

**Lane 1 :** Untreated C6 (Rat glial tumor glial cell) whole cell lysate
**Lane 2 :** C6 treated with 100ng/ml Calyculin A for 30 min whole cell lysate
**Lane 3 :** C6 treated with 100ng/ml Calyculin A for 30 min whole cell lysate, then membrane treated with Alkaline Phosphatase for 1 hour

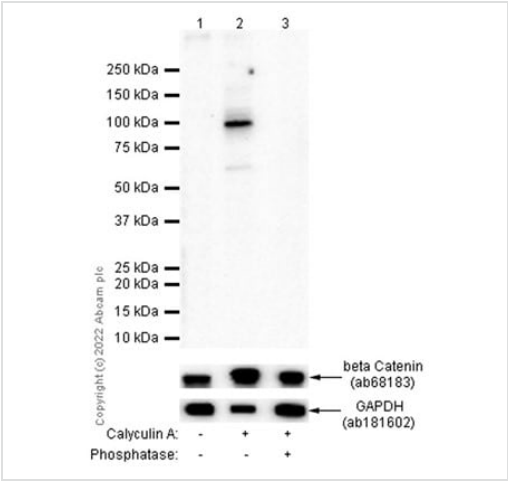
Lysates/proteins at 15 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 85 kDa
**Observed band size:** 100 kDa

**Exposure time:** 40 seconds

**Blocking and diluting buffer and concentration:** 5% NFDM/TBST




Western blot - Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777)

**All lanes :** Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777) at 1/1000 dilution

**Lane 1 :** Untreated NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate
**Lane 2 :** NIH/3T3 treated with 100nM Calyculin A for 30 min whole cell lysate
**Lane 3 :** NIH/3T3 treated with 100nM Calyculin A for 30 min whole cell lysate, then membrane treated with Alkaline Phosphatase for 1 hour

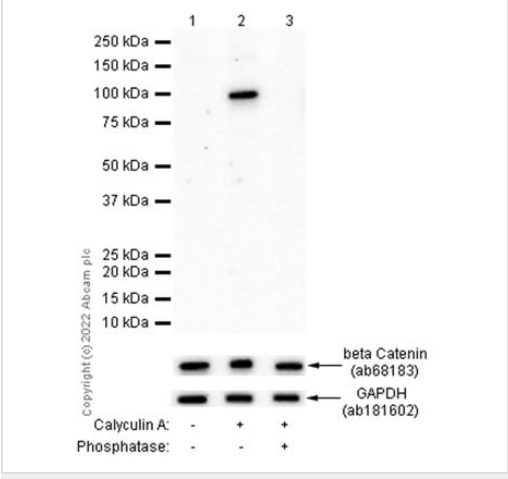
Lysates/proteins at 15 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 85 kDa
**Observed band size:** 100 kDa

**Exposure time:** 120 seconds

**Blocking and diluting buffer and concentration:** 5% NFDM/TBST




Western blot - Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777)

**All lanes :** Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777) at 1/1000 dilution

**Lane 1 :** Untreated HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
**Lane 2 :** HeLa treated with 100nM Calyculin A for 30 min whole cell lysate
**Lane 3 :** HeLa treated with 100nM Calyculin A for 30 min whole cell lysate, then membrane treated with Alkaline Phosphatase for 1 hour

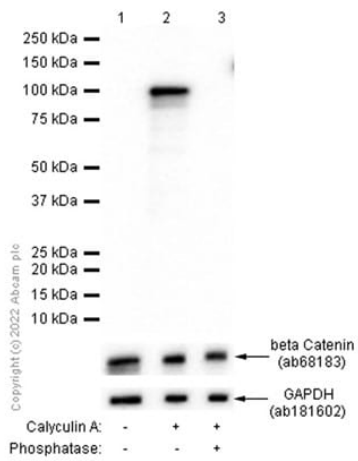
Lysates/proteins at 15 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 85 kDa
**Observed band size:** 100 kDa

**Exposure time:** 80 seconds

**Blocking and diluting buffer and concentration:** 5% NFDM/TBST




Western blot - Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777)

**All lanes :** Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777) at 1/1000 dilution

**Lane 1 :** Untreated HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate
**Lane 2 :** HEK-293 treated with 50nM Calyculin A for 3 hours whole cell lysate
**Lane 3 :** HEK-293 treated with 50nM Calyculin A for 3 hours whole cell lysate, then membrane treated with Alkaline Phosphatase for 1 hour

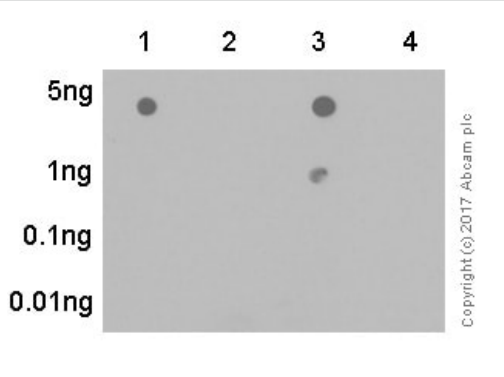
Lysates/proteins at 15 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 85 kDa
**Observed band size:** 100 kDa

**Exposure time:** 10 seconds

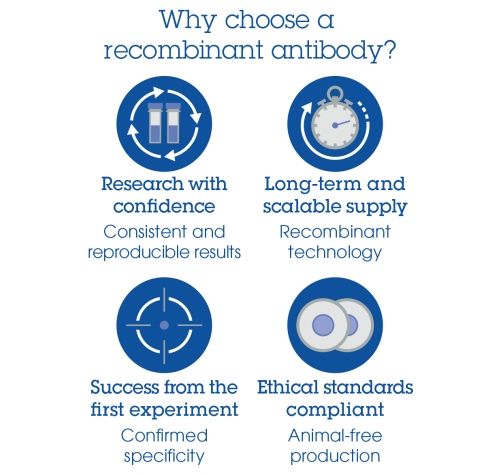
**Blocking and diluting buffer and concentration:** 5% NFDM/TBST




Dot Blot - Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777)

Dot blot analysis of Beta catenin phospho peptide with ab75777 at 1/1000 exposed for 3 minutes. Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) (1/100,000) was used as the secondary antibody. Blocking buffer 5% NFDM/TBST. Diluting buffer 5% NFDM/TBST.

Lane 1: Beta catenin (pS33+pS37) phospho peptide
Lane 2: Beta catenin (pS33) phospho peptide
Lane 3: Beta catenin (pS37) phospho peptide
Lane 4: Beta catenin non-phospho peptide




Anti-beta Catenin (phospho S37) antibody [EP742(2)Y] (ab75777)



## 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 **https://www.abcam.co.jp/abpromise** or contact our technical team.

## Terms and conditions

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