abcam

Product datasheet

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



重组 RabMAb

15 References 6 图像

概述

产品名称 Anti-beta Catenin (phospho S37)抗体[EP742(2)Y]

描述 兔单克隆抗体[EP742(2)Y] to beta Catenin (phospho S37)

宿主 Rabbit

特异性 Stimulation may be required to allowdetection of the phosphorylated protein. Please see

images belowfor recommended treatment conditions and positive controls.

经测试应用 适用于: WB, Dot blot

不适用于: Flow Cyt,ICC/IF,IHC-P or IP

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 293T cell lysates, untreated or treated with calyculin A.

常规说明 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**.

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

纯**度** Protein A purified

克隆 单克隆

克隆编号 EP742(2)Y

同种型 IgG

应用

The Abpromise quarantee

Abpromise™承诺保证使用ab75777于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应 用	Ab评论	说明
WB		1/1000. Detects a band of approximately 100 kDa (predicted molecular weight: 85 kDa).
Dot blot		1/1000.

应用说明

Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

靶标

功能

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.

组织特异性

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

疾病相关

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.

序列相似性 Belongs to the beta-catenin family.

Contains 12 ARM repeats.

翻译后修饰 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.

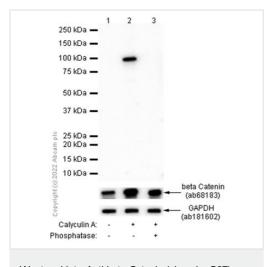
细胞定位 Cytoplasm. Nucleus. Cytoplasm > cytoskeleton. Cell junction > adherens junction. Cell junction.

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 CLIS2 and MLIC4 promotes purpose translocation leteraction with EMD inhibits purpose.

with GLIS2 and MUC1 promotes nuclear translocation. Interaction with EMD inhibits nuclear

localization.

图片



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

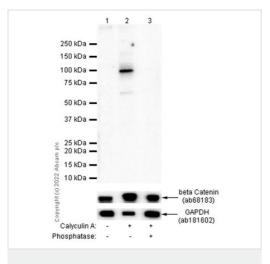
dilution

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) (<u>ab97051</u>) 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

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.

1 2 3 250 kDa — 150 kDa — 100 kDa — 75 kDa — 37 kDa — 37 kDa — 10 kDa — 10 kDa — 10 kDa — 25 kDa — 10 kDa — 10 kDa — 26 kDa — 27 kDa — 28 kDa — 29 kDa — 29 kDa — 20 kDa

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

Secondary

All lanes : Goat Anti-Rabbit lgG 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

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.

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

(ab68183)

GAPDH (ab181602)

250 kDa -

150 kDa -

50 kDa -

37 kDa -

25 kDa — 20 kDa —

15 kDa —

Calyculin A:

Secondary

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

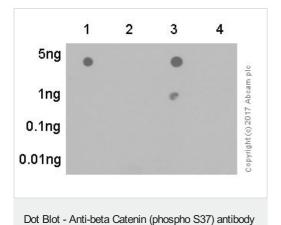
dilution

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

Exposure time: 10 seconds

Blocking and diluting buffer and concentration: 5%

NFDM/TBST



[EP742(2)Y] (ab75777)

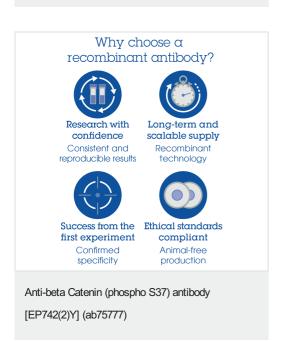
Dot blot analysis of Beta catenin phospho peptide with ab75777 at 1/1000 exposed for 3 minutes. Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) (1/100,000) was used as the secondary antibody. Blocking buffer 5% NFDM/TBST. Diluting buffer 5% NFDM/TBST.

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



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