abcam

Product datasheet

Anti-beta Catenin (phospho S37) antibody ab47335

★★★★★ 2 Abreviews 3 References 2 图像

概述

产品名称 Anti-beta Catenin (phospho S37)抗体

描述 兔多克隆抗体to beta Catenin (phospho S37)

宿主 Rabbit

特异性 This antibody detects endogenous levels of ß-Catenin only when phosphorylated at serine 37.

适用于: WB, IHC-P

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🔷

免疫原 Synthetic peptide corresponding to Human beta Catenin aa 1-100 (phospho S37).

Database link: P35222

阳性对照 Extracts from SW626 cells, breast carcinoma tissue

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Without Mg+2 and Ca+2

纯**度** Immunogen affinity purified

纯**化说明** The antibody was affinity-purified using epitope-specific phosphopeptide. The antibody against

non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding

to the phosphorylation site.

1

克隆 多克隆

同种型 IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab47335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		1/500 - 1/1000. Detects a band of approximately 86 kDa (predicted molecular weight: 86 kDa).
IHC-P		Use at an assay dependent concentration.

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.

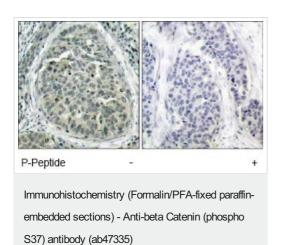
EGF stimulates tyrosine phosphorylation. Phosphorylation on Tyr-654 decreases CDH1 binding and enhances TBP binding.

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.

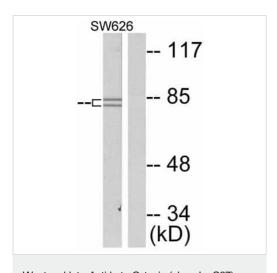
细胞定位

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

图片



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using ab47335. Image on left without immunising peptide, image on right with immunising peptide.



Western blot - Anti-beta Catenin (phospho S37) antibody (ab47335)

All lanes : Anti-beta Catenin (phospho S37) antibody (ab47335) at 1/500 dilution

Lane 1: Extracts from SW 626 cells treated with Forskolin

Lane 2: Extracts from SW 626 cells untreated

Predicted band size: 86 kDa

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