

Product datasheet

Anti-beta Catenin antibody [BDI770] ab19452

1 References 1 图像

概述

产品名称	Anti-beta Catenin抗体[BDI770]
描述	小鼠单克隆抗体[BDI770] to beta Catenin
宿主	Mouse
经测试应用	适用于: WB, IP, ELISA
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide, corresponding to amino acids 35-50 of beta Catenin (dephosphorylated).
阳性对照	Cell lysate of LiCl treated SW480 cells.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.1% Sodium Azide
纯度	IgG fraction
纯化说明	Purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography. Lyophilised from x2 PBS, Polyethylene glycol, Sucrose. Concentration before lyophilisation: 100 µg/ml
克隆	单克隆
克隆编号	BDI770
同种型	IgG1
轻链类型	kappa

应用

Our [Abpromise guarantee](#) covers the use of **ab19452** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB		
IP		
ELISA		
<b>应用说明</b>	<p>ELISA: Use at a concentration of 0.05 µg/ml. IP: Use 1-10µg for 10<sup>6</sup> vanadate treated A431 cells. WB: Use at a concentration of 1ug/ml for AP/BCIP/NBT (MTT) detection; 0.1ug/ml for HRPO/ECL detection . Predicted molecular weight: 86 kDa. Dilution optimised using Chromogenic detection. Not tested in other applications. Optimal dilutions/concentrations should be determined by the end user.</p>	
<b>靶标</b>		
<b>功能</b>	<p>Key downstream 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.</p> <p>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.</p>	
<b>组织特异性</b>	<p>Expressed in several hair follicle cell types: basal and peripheral matrix cells, and cells of the outer and inner root sheaths. Expressed in colon.</p>	
<b>疾病相关</b>	<p>Defects in CTNNB1 are associated with colorectal cancer (CRC) [MIM:114500].</p> <p>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.</p> <p>Defects in CTNNB1 are a cause of pilomatixoma (PTR) [MIM:132600]; a common benign skin tumor.</p> <p>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.</p> <p>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.</p> <p>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.</p>	
<b>序列相似性</b>	<p>Belongs to the beta-catenin family.</p> <p>Contains 12 ARM repeats.</p>	
<b>翻译后修饰</b>	<p>Phosphorylation by GSK3B requires prior phosphorylation of Ser-45 by another kinase. Phosphorylation proceeds then from Thr-41 to Ser-37 and Ser-33.</p>	

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.

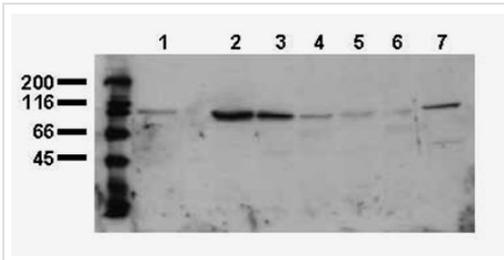
#### 细胞定位

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

---



Western blot - beta Catenin antibody [BDI770]  
(ab19452)

**All lanes :** Anti-beta Catenin antibody  
[BDI770] (ab19452) at 0.5 µg/ml

**Lane 1 :** Whole cell lysates of serum starved tumor A431 cells

**Lane 2 :** Whole cell lysates of serum starved tumor SW480 cells

**Lane 3 :** Whole cell lysates of serum starved tumor SW620 cells

**Lane 4 :** Whole cell lysates of serum starved tumor HT29 cells

**Lane 5 :** Whole cell lysates of serum starved tumor MCF7 cells

**Lane 6 :** Whole cell lysates of serum starved tumor MDA-MB231 cells

**Lane 7 :** Whole cell lysates of serum starved tumor T47D cells

Lysates/proteins at 20000 cells per lane.

### Secondary

**All lanes :** A HRP-conjugated antibody

Developed using the ECL technique.

**Predicted band size:** 86 kDa

**Exposure time:** 30 seconds

Recommended blocking with Casin/Tween20 based buffer.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

### 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 <http://www.abcam.cn/abpromise> or contact our technical team.

### **Terms and conditions**

---

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