

## Product datasheet

# Anti-beta Catenin antibody ab2365

★★★★★ 7 Abreviews 17 References 5 图像

### 概述

产品名称	Anti-beta Catenin抗体
描述	兔多克隆抗体to beta Catenin
宿主	Rabbit
经测试应用	适用于: WB, IHC-P, IHC-Fr, ICC, ICC/IF, IP
种属反应性	与反应: Mouse, Rat, Chicken, Human, Xenopus laevis
免疫原	Synthetic peptide corresponding to beta Catenin.
阳性对照	IHC-P: Breast carcinoma tissue. WB: A431 cell lysate. IP: A431 whole cell lysate. ICC/IF: Rat gastric epithelial cells. IHC-Fr: Mouse skin tissue.

### 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. Avoid freeze / thaw cycle.
存储溶液	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: 0.0268% PBS, 1% BSA
纯度	Protein A purified
克隆	多克隆
同种型	IgG

### 应用

Our [Abpromise guarantee](#) covers the use of **ab2365** 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	★★★★★	Use at an assay dependent concentration. Predicted molecular weight: 85 kDa.

应用	Ab评论	说明
IHC-P		1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Incubate with primary antibody for 10 minutes at room temperature.
IHC-Fr	★★★★★	Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration.
ICC/IF	★★★★☆	1/100. (see Abreview).
IP		Use a concentration of 5 µg/ml.

## 靶标

<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>	Expressed in several hair follicle cell types: basal and peripheral matrix cells, and cells of the outer and inner root sheaths. Expressed in colon.
<b>疾病相关</b>	<p>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.</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>	Phosphorylation by GSK3B requires prior phosphorylation of Ser-45 by another kinase.

Phosphorylation proceeds then from Thr-41 to Ser-37 and Ser-33.

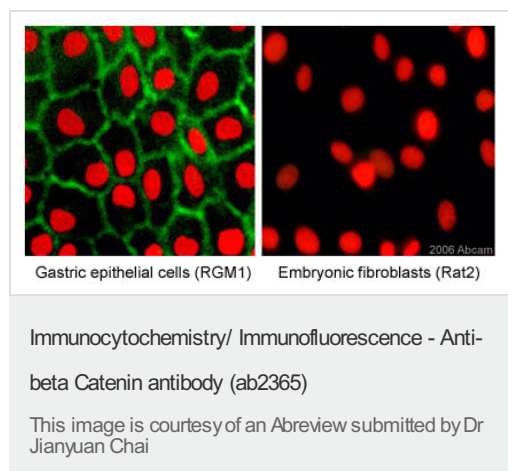
EGF stimulates tyrosine phosphorylation. Phosphorylation on Tyr-654 decreases CDH1 binding and enhances TBP binding.

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

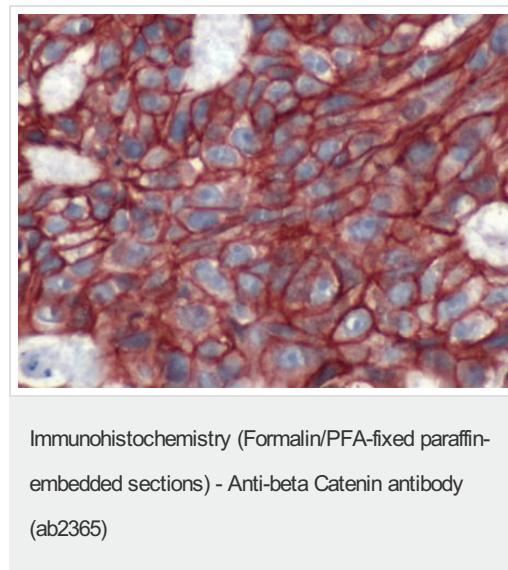
Cytoplasm. Nucleus. Cytoplasm > cytoskeleton. Cell junction > adherens junction. Cell junction. Cell membrane. Cytoplasmic when it is unstabilized (high level of phosphorylation) or bound to CDH1. Translocates to the nucleus when it is stabilized (low level of phosphorylation). Interaction with GLIS2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

## 图片

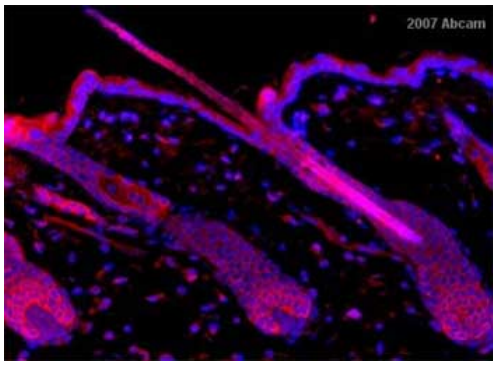


[ab2365](#) at 1/100 staining rat gastric epithelial cells by ICC/IF. The cells were formaldehyde fixed and blocked with 5% serum prior to incubation with the antibody for 2 hours. A FITC conjugated goat anti-rabbit IgG was used as the secondary. Nuclei were counterstained with propidium iodide.

The image shows the staining of gastric epithelial cells (left hand panel) and the staining of embryonic fibroblasts (negative control, right hand panel).



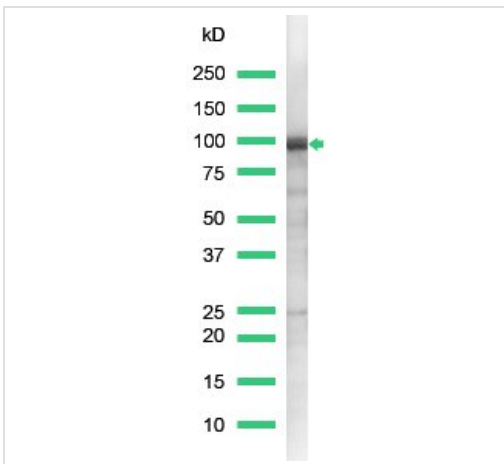
Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for beta Catenin using ab2365 at 1/250 dilution in immunohistochemical analysis.



Immunohistochemistry (Frozen sections) - Anti-beta Catenin antibody (ab2365)

This image is courtesy of an anonymous Abreview

ab2365 at 1/200 staining mouse skin tissue sections by IHC-Fr. The tissue was paraformaldehyde fixed and blocked with serum prior to incubation with the antibody for 16 hours. An Alexa-Fluor® 594 conjugated chicken anti-rabbit polyclonal was used as the secondary.

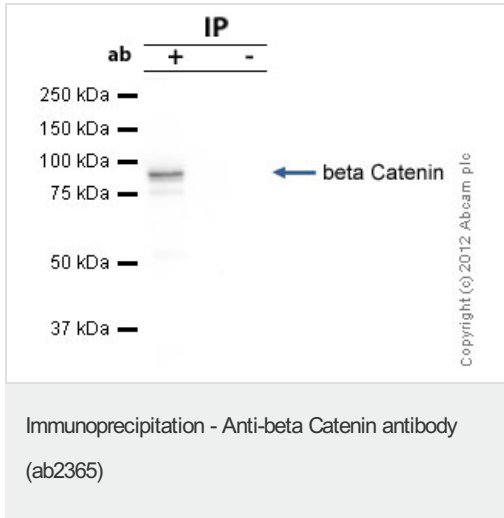


Western blot - Anti-beta Catenin antibody (ab2365)

Anti-beta Catenin antibody (ab2365) at 1/25 dilution + A431 cell lysate

**Predicted band size:** 85 kDa

**Observed band size:** 92 kDa



Beta Catenin was immunoprecipitated using 0.5mg A431 whole cell extract, 5µg of Rabbit polyclonal to beta Catenin and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, A431 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with [ab2365](#).

Secondary: Mouse monoclonal [SB62a]

Secondary Antibody to Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 85kDa; beta Catenin.

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