

Recombinant Human beta Catenin protein ab158230

1 图像

| 描述 | |
|-----------|--|
| 产品名称 | 重组人beta Catenin蛋白 |
| 表达系统 | Wheat germ |
| Accession | <u>P35222</u> |
| 蛋白长度 | Full length protein |
| 无动物成分 | No |
| 性质 | Recombinant |
| 种属 | Human |
| 序列 | <div>MATQADLMELDMAMEPDRKAAVSHWQQQSYLDSGIHSGATTT APSLSGKG NPEEEDVDTSQVLYEWEQGFSQSFTQEQVADIDGQYAMTRAQ RVRAAMFP ETLDEGMQIPSTQFDAAHPTNVQRLAEPSQMLKHAVVNLINY QDDAELAT RAIPELTKLLNDEDQVVVNKAAVMVHQLSKKEASRHAIMRSP QMVSAIVR TMQNTNDVETARCTAGTLHNLSSHREGLLAIFKSGGIPALVK MLGSPVDS VLFYAITTLHNLHHQEGAKMAVRLAGGLQKMVALLNKTNVK FLAITTDC LQILAYGNQESKLIILASGGPQALVNIMRTYTYEKLLWTTSR VLKVLSVC SSNKPAIVEAGGMQALGLHLTDPSQRLVQNCLWTLRNLSDA TKQEGMEG LLGTLVQLLGSDDINVVTCAAGILSNLTCNNYKNKMMVCQVG GIEALVRT VLRAGDREDITEPAICALRHLSRHQEAEMAQNAVRLHYGLP VVVKLLHP PSHWPLIKATVGLIRNLALCPANHAPLREQGAIPRLVQLLVR AHQDTQRR TSMGGTQQQFVEGVRMEEIVEGCTGALHILARDVHNRIVIRG LNTIPLFV QLLYSPIENIQRVAAGVLCELAQDKEAAEAIEAEGATAPLTE LLHSRNEG VATYAAAVLFRMSDKPQDYKKRLSVELTSSLFRTEPMAWNE TADLGLDI</div> |

GAQGEPLGYRQDDPSYRSFHSGGYGQDALGMDPMMHEMGGH
HPGADYPV DGLPDLGHAQDLMDGLPPGDSNQLAWFDTDL

| | |
|-------|------------------------|
| 预测分子量 | 112 kDa including tags |
| 氨基酸 | 1 to 781 |
| 标签 | GST tag N-Terminus |

技术指标

Our **Abpromise guarantee** covers the use of **ab158230** in the following tested applications.

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

| | |
|------|--------------|
| 应用 | SDS-PAGE |
| | ELISA |
| | Western blot |
| 形式 | Liquid |
| 补充说明 | |

制备和贮存

| | |
|--------|--|
| 稳定性和存储 | Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl |
|--------|--|

常规信息

| | |
|-------|--|
| 功能 | <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> |
| 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 | <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> |

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 pleomorphic 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.

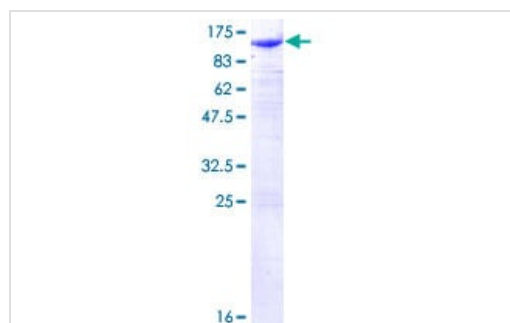
翻译后修饰

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



ab158230 on a 12.5% SDS-PAGE stained with Coomassie Blue.

SDS-PAGE - Recombinant Human beta Catenin protein (ab158230)

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