abcam

Product datasheet

Anti-beta Catenin antibody - ChIP Grade ab227499

9 References 22 图像

概述

产品名称	Anti-beta Catenin抗体- ChIP Grade
描述	**兔多克隆抗体**to beta Catenin - ChIP Grade
宿主	Rabbit
经测试应用	**适用于:** WB, IP, IHC-P, Flow Cyt, ChIP, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human **预测可用于:** Sheep, Rabbit, Chicken, Cow, Dog, Pig, Xenopus laevis, Zebrafish, Rhesus monkey
免疫原	Recombinant fragment within Human beta Catenin (N terminal). The exact sequence is proprietary. Database link: **P35222**
阳性对照	IHC-P: Mouse colon, skin, intestine, duodenum and urinary bladder tissues; Human esophagus and cervix tissues; Rat colon and duodenum tissues. ICC/IF: A431, HeLa and HCT 116 cells. WB: Mouse brain lysate; PC-12, A549, NCI-H1299 and HCT 116 and HeLa whole cell extracts. IP: HeLa whole cell extract. Flow Cyt: HeLa cells. ChIP: HCT 116 chromatin extract.
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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
纯度	Immunogen affinity purified

克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab227499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 - 1/20000. Predicted molecular weight: 85 kDa.
IP		1/50 - 1/100.
IHC-P		1/100 - 1/1000.
Flow Cyt		1/50 - 1/200.
ChIP		Use at an assay dependent concentration.
ICC/IF		1/100 - 1/1000.

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.

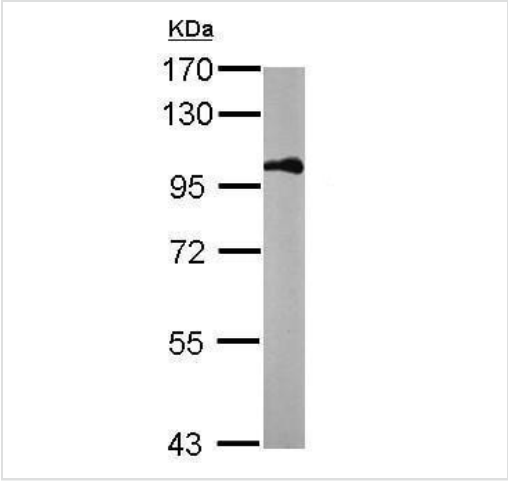
翻译后修饰

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



Western blot - Anti-beta Catenin antibody - ChIP Grade (ab227499)

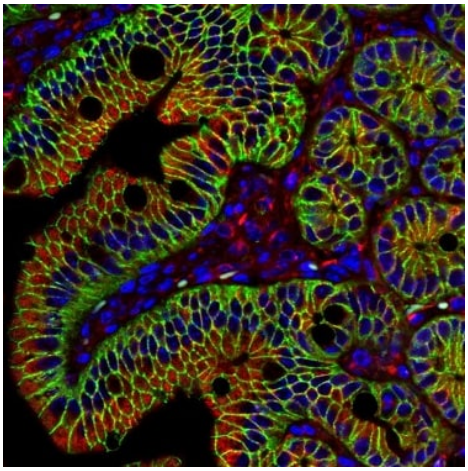
Anti-beta Catenin antibody - ChIP Grade (ab227499) at 1/1000 dilution + Mouse brain lysate at 50 µg

Secondary

HRP-conjugated anti-rabbit IgG

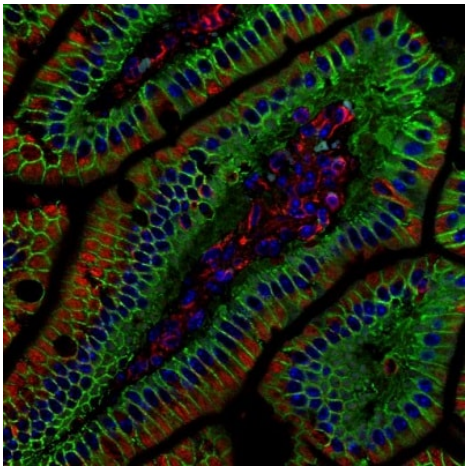
Predicted band size: 85 kDa

7.5% SDS-PAGE gel.



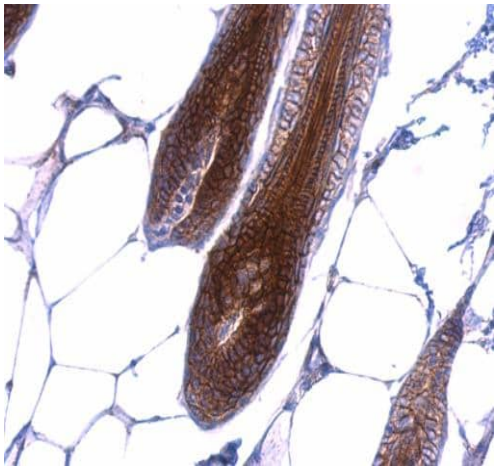
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse colon tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis. Counterstain: Alpha-tubulin was labeled with an anti-alpha tubulin antibody at 1/500 dilution. Nuclear counterstain: Hoechst 33342 (blue).



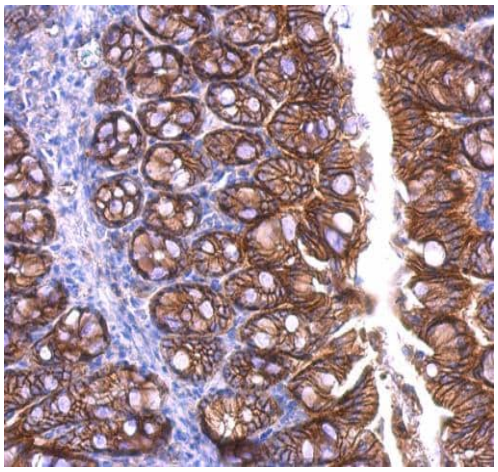
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse colon tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis. Counterstain: Alpha-tubulin was labeled with an anti-alpha tubulin antibody at 1/500 dilution. Nuclear counterstain: Hoechst 33342 (blue).



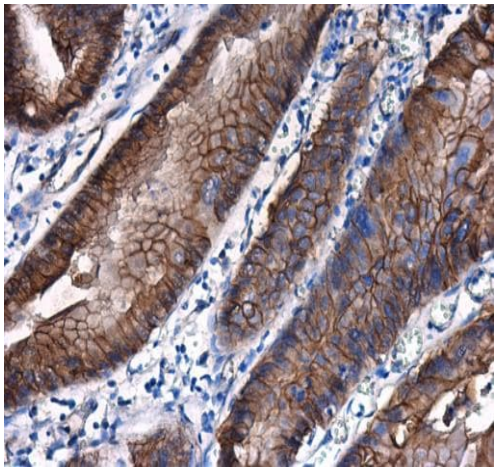
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse skin tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



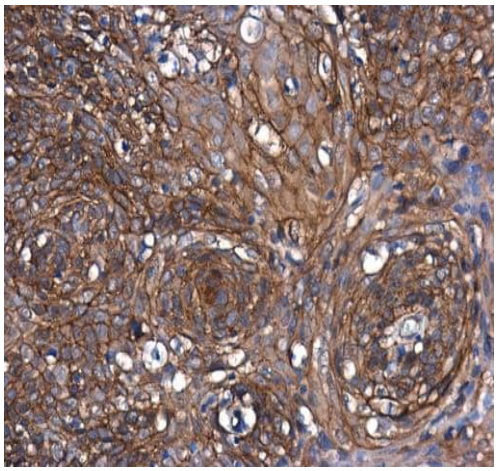
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse colon tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



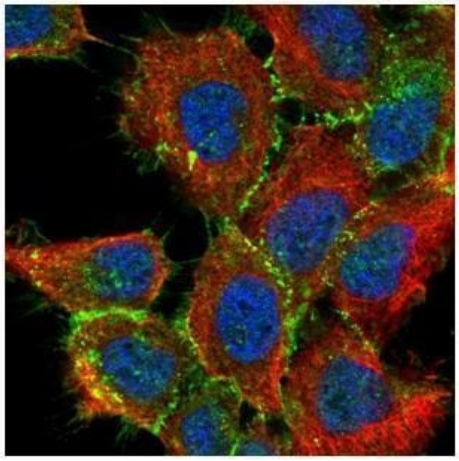
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded human esophagus tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



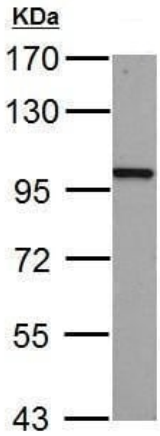
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded human cervix tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraformaldehyde-fixed A431 (human epidermoid carcinoma cell line) cells stained for beta Catenin (green) using ab227499 at 1/500 dilution in ICC/IF. Counterstain: Alpha-tubulin filaments were labeled with an anti-alpha tubulin antibody at 1/2000 dilution (red).



Western blot - Anti-beta Catenin antibody - ChIP Grade (ab227499)

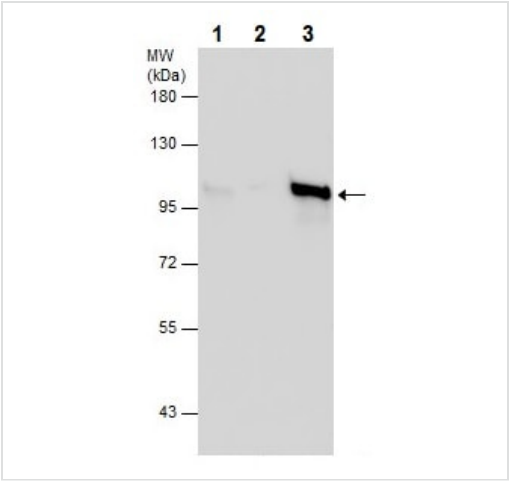
Anti-beta Catenin antibody - ChIP Grade (ab227499) at 1/1000 dilution + PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate at 30 µg

Secondary

HRP-conjugated anti-rabbit IgG

Predicted band size: 85 kDa

7.5% SDS-PAGE gel.



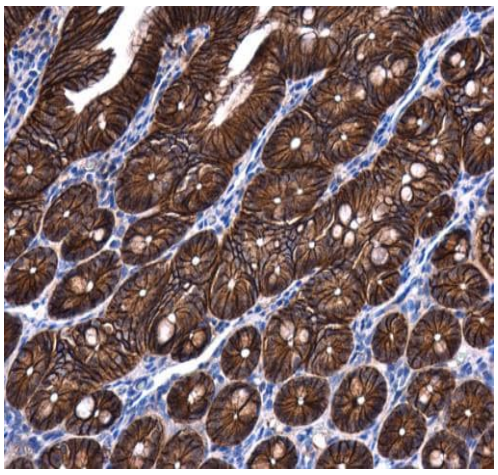
Immunoprecipitation - Anti-beta Catenin antibody - ChIP Grade (ab227499)

beta Catenin was immunoprecipitated from HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell extract with 5 µg ab227499. Western blot was performed from the immunoprecipitate using ab227499. Anti-Rabbit IgG was used as a secondary reagent.

Lane 1: HeLa whole cell extract.

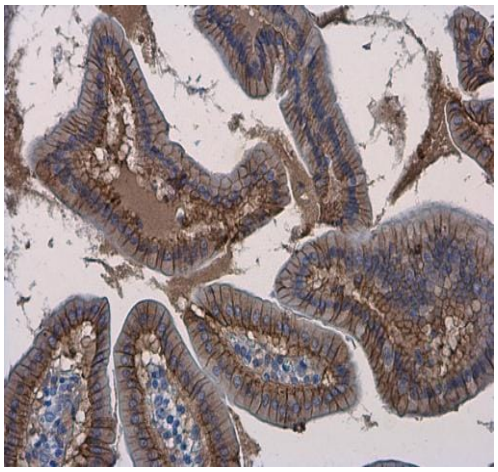
Lane 2: Control IgG instead of ab227499 in HeLa whole cell extract.

Lane 3: ab227499 IP in HeLa whole cell extract.



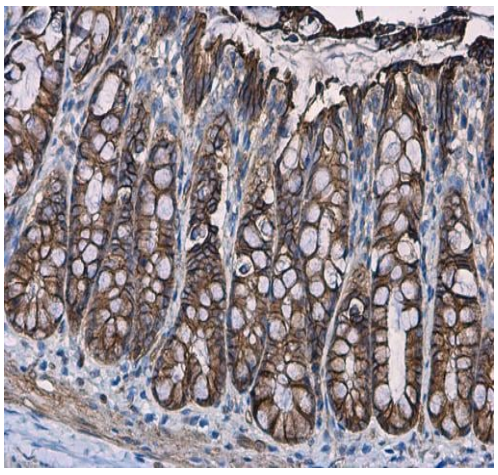
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse intestine tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



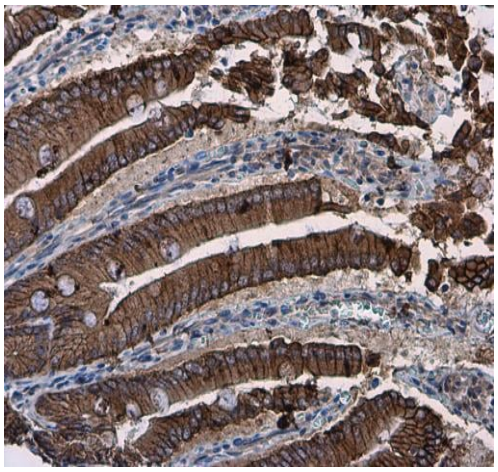
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse duodenum tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



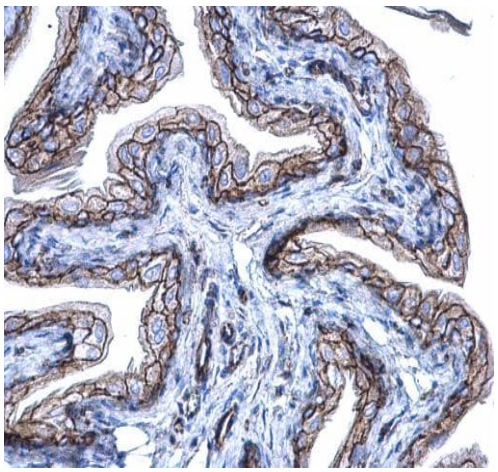
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded rat colon tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



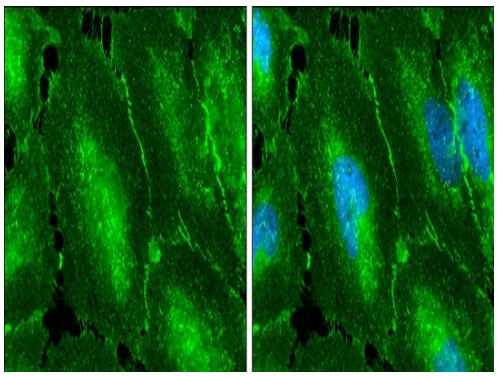
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded rat duodenum tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



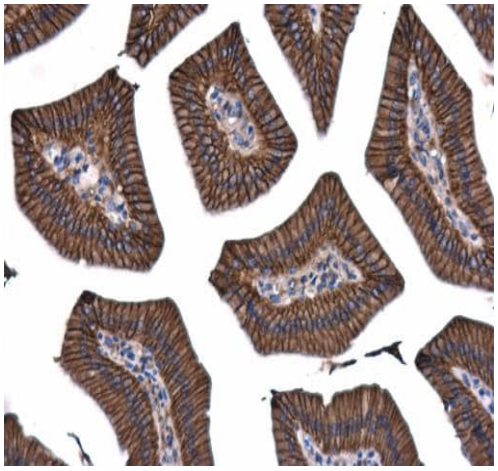
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse urinary bladder tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



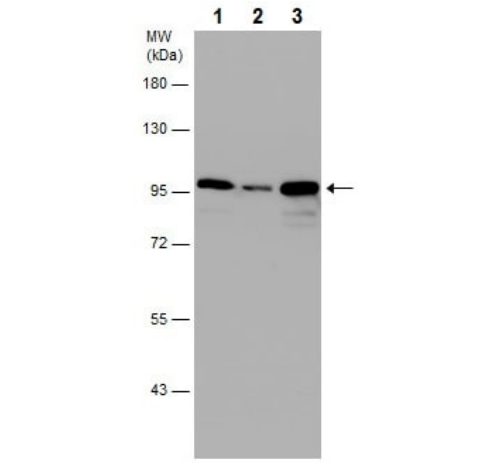
Immunocytochemistry/ Immunofluorescence - Anti-beta Catenin antibody - ChIP Grade (ab227499)

4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for beta Catenin (green) using ab227499 at 1/500 dilution in ICC/IF. Nuclear counterstain: Hoechst 33342 (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Paraffin-embedded mouse duodenum tissue stained for beta Catenin using ab227499 at 1/500 dilution in immunohistochemical analysis.



Western blot - Anti-beta Catenin antibody - ChIP Grade (ab227499)

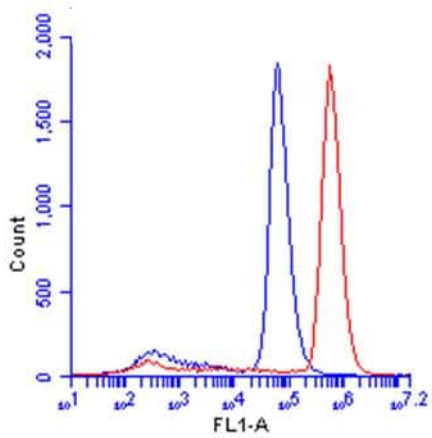
All lanes : Anti-beta Catenin antibody - ChIP Grade (ab227499) at 1/10000 dilution

Lane 1 : A549 (human lung carcinoma cell line) whole cell extract
Lane 2 : NCI-H1299 (human lung carcinoma cell line) whole cell extract
Lane 3 : HCT 116 (human colorectal carcinoma cell line) whole cell extract

Lysates/proteins at 30 µg per lane.

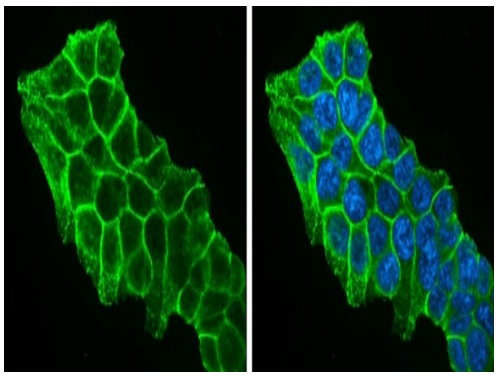
Predicted band size: 85 kDa

7.5% SDS-PAGE gel.



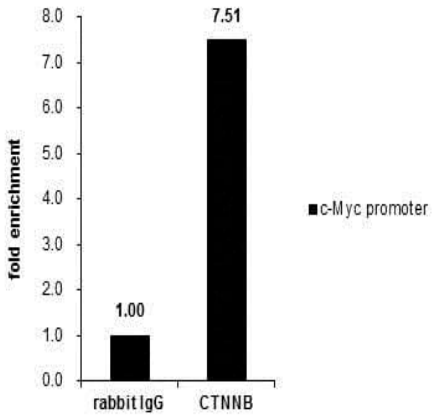
Flow Cytometry - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling beta Catenin with ab227499 at 1/50 dilution (green) compared with an unlabeled sample used as a control (blue). A Dylight® 488-conjugated secondary antibody was used.



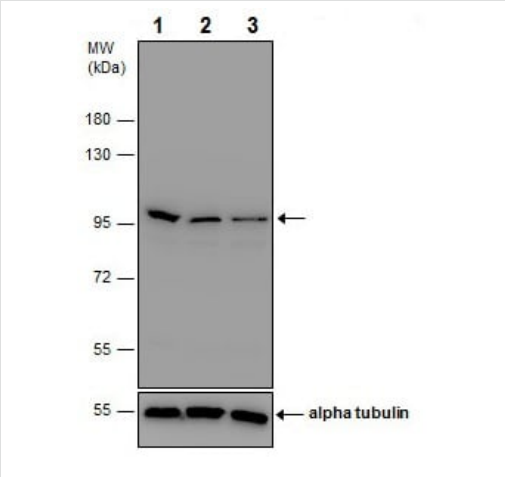
Immunocytochemistry/ Immunofluorescence - Anti-beta Catenin antibody - ChIP Grade (ab227499)

4% paraformaldehyde-fixed HCT 116 (human colorectal carcinoma cell line) cells stained for beta Catenin (green) using ab227499 at 1/500 dilution in ICC/IF. Nuclear counterstain: Hoechst 33342 (blue).



ChIP - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Cross-linked ChIP was performed with HCT 116 (human colorectal carcinoma cell line) chromatin extract and 5 µg of either control rabbit IgG or ab227499 antibody. The precipitated DNA was detected by PCR with primer set targeting to c-Myc promoter.



Western blot - Anti-beta Catenin antibody - ChIP Grade (ab227499)

Lanes 1-2 : Anti-beta Catenin antibody - ChIP Grade (ab227499) at 1/1000 dilution
Lane 3 : Anti-beta Catenin antibody - ChIP Grade (ab227499) at 1000 cells

Lane 1 : Non-transfected HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell extract
Lanes 2-3 : beta Catenin shRNA transfected HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell extract

Lysates/proteins at 30 µg per lane.

Secondary
All lanes : HRP-conjugated anti-rabbit IgG

Predicted band size: 85 kDa

7.5% SDS-PAGE gel.

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