


Anti-beta Catenin antibody [SP328] ab224803

KO 評価済 リコンビナント RabMAb

画像数 31

製品の概要

製品名	Anti-beta Catenin antibody [SP328]
製品の詳細	Rabbit monoclonal [SP328] to beta Catenin
由来種	Rabbit
アプリケーション	適用あり: Flow Cyt (Intra), ICC/IF, IHC-P, WB
種交差性	交差種: Mouse, Rat, Human 交差が予測される動物種: Cow, Dog 
免疫原	Synthetic peptide corresponding to Human beta Catenin (C terminal). Database link: P35222
ポジティブ・コントロール	IHC-P: Human breast ductal carcinoma, breast, bladder, bladder transitional carcinoma, stomach, colon, colon adenocarcinoma, kidney, renal cell carcinoma, liver, hepatocellular carcinoma, lung, lung squamous cell carcinoma, lung adenocarcinoma, ovary, ovary adenocarcinoma, prostate, prostate adenocarcinoma and stomach adenocarcinoma tissues. WB: HEK-293, Wild-type MCF7 and HeLa cell lysates. Flow Cyt (Intra): HEK-293, HeLa, NIH/3T3 and C6 cells. ICC/IF: HeLa and C6 cells.
特記事項	<p>This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.</p> <p>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.</p> <p>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</p>

製品の特性

製品の状態	Liquid
保存方法	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.

バッファー	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
精製度	Protein A/G purified
特記事項 (精製)	Purified from TCS by protein A/G.
ポリ/モノ	モノクローナル
クローン名	SP328
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab224803の使用に適用されます**
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/400. Primary incubation for 30 minutes at 4°C.
ICC/IF		1/10.
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Primary incubation for 10 minutes at room temperature.
WB		1/400. Predicted molecular weight: 85 kDa. Primary incubation for 1 hour at room temperature.

ターゲット情報

機能	<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>
組織特異性	Expressed in several hair follicle cell types: basal and peripheral matrix cells, and cells of the outer and inner root sheaths. Expressed in colon.
関連疾患	<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>

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.

配列類似性

Belongs to the beta-catenin family.
Contains 12 ARM repeats.

翻訳後修飾

Phosphorylation by GSK3B requires prior phosphorylation of Ser-45 by another kinase. Phosphorylation proceeds then from Thr-41 to Ser-37 and Ser-33.

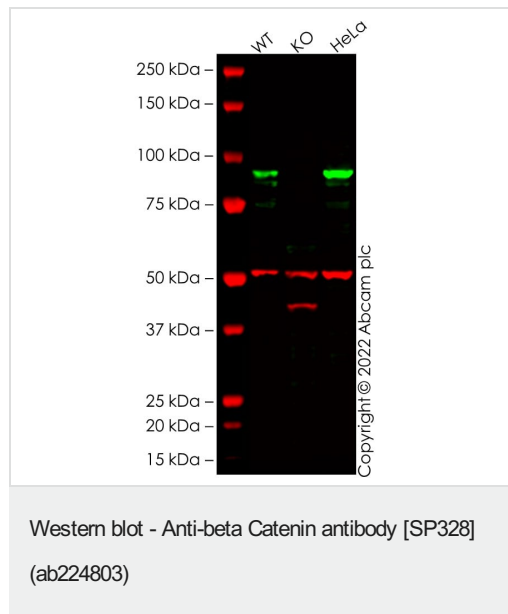
EGF stimulates tyrosine phosphorylation. Phosphorylation on Tyr-654 decreases CDH1 binding and enhances TBP binding.

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.

細胞内局在

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.

画像



All lanes : Anti-beta Catenin antibody [SP328] (ab224803) at 1/400 dilution

Lane 1 : Wild-type MCF7 cell lysate

Lane 2 : CTNNB1 knockout MCF7 cell lysate

Lane 3 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 85 kDa

Observed band size: 85/90 kDa

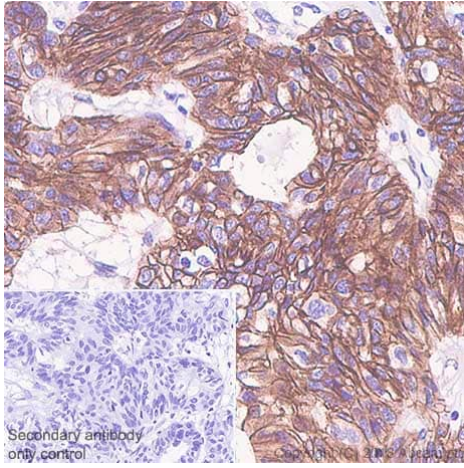
False colour image of Western blot: Anti-beta Catenin antibody [SP328] staining at 1/400 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab224803 was shown to bind specifically to beta Catenin. A band was observed at 85/90 kDa in wild-type MCF7 cell lysates with no signal observed at this size in CTNNB1 knockout cell line [ab286762](#). To generate this image, wild-type and CTNNB1 knockout MCF7 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Anti-beta Catenin antibody [SP328] (ab224803) at 1/100 dilution + HEK-293 (human epithelial cell line from embryonic kidney) cell lysate

Predicted band size: 85 kDa

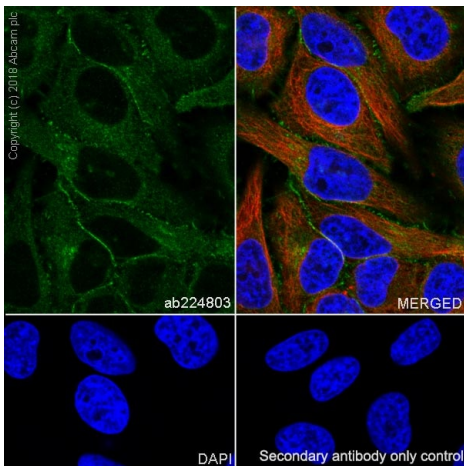
Western blot - Anti-beta Catenin antibody [SP328]
(ab224803)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

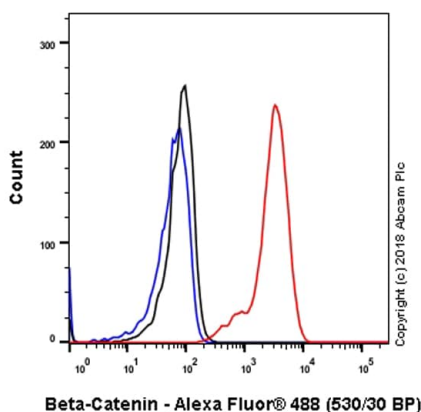
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue sections labeling beta Catenin with ab224803 at 1/100 dilution (1.20 µg/ml). Heat mediated antigen retrieval with sodium Citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Membranous staining on the human breast carcinoma, performed on a Leica Biosystems BOND™ RX instrument.

The section was incubated with ab224803 for 10 mins at room temperature.



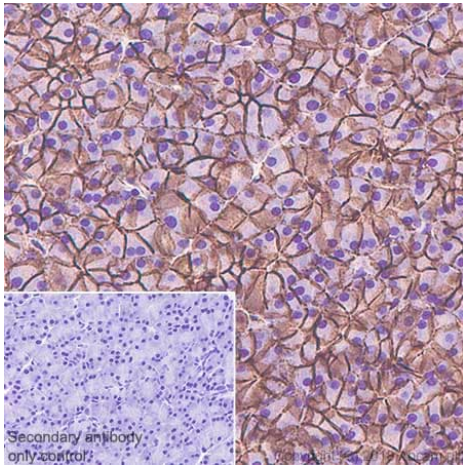
Immunocytochemistry/ Immunofluorescence - Anti-beta Catenin antibody [SP328] (ab224803)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling beta Catenin with purified ab224803 at 1/10 (9.9 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-beta Catenin antibody [SP328] (ab224803)

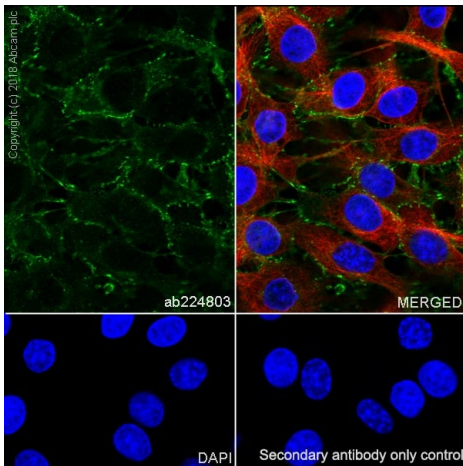
Flow cytometry analysis of C6 (rat glial tumor glial cell) labeling beta Catenin with purified ab224803 at 1/200 dilution (0.495 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal IgG (**ab172730**) (black). Unlabeled control - Unlabelled cells (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

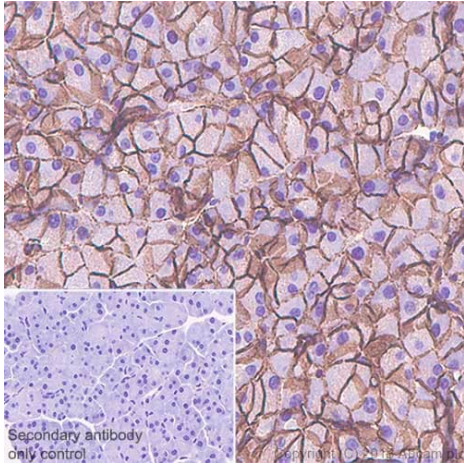
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat pancreas tissue sections labeling beta Catenin with ab224803 at 1/100 dilution (1.20 µg/ml). Heat mediated antigen retrieval with sodium Citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Mainly membranous staining on the rat pancreas, performed on a Leica Biosystems BOND™ RX instrument.

The section was incubated with ab224803 for 10 mins at room temperature.



Immunocytochemistry/ Immunofluorescence - Anti-beta Catenin antibody [SP328] (ab224803)

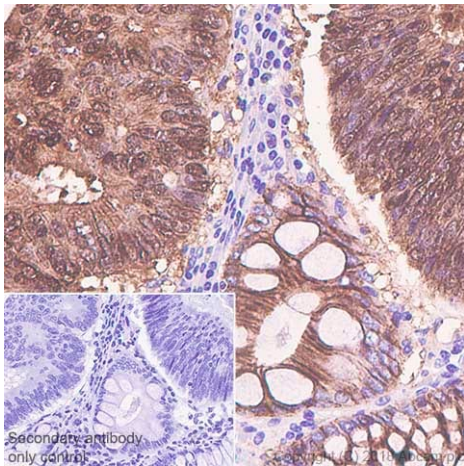
Immunocytochemistry/ Immunofluorescence analysis of C6 (rat glial tumor glial cell) cells labeling beta Catenin with purified ab224803 at 1/10 (9.9 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse pancreas tissue sections labeling beta Catenin with ab224803 at 1/100 dilution (1.20 µg/ml). Heat mediated antigen retrieval with sodium Citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Mainly membranous staining on the mouse pancreas, performed on a Leica Biosystems BOND™ RX instrument.

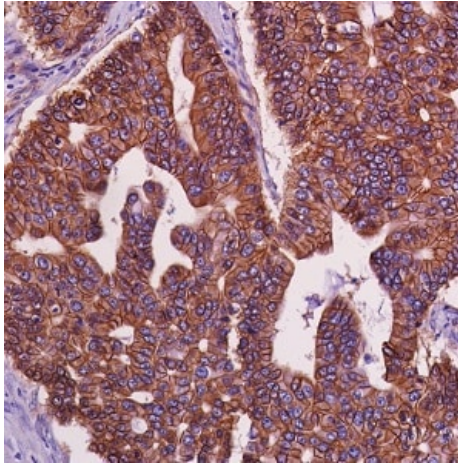
The section was incubated with ab224803 for 10 mins at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

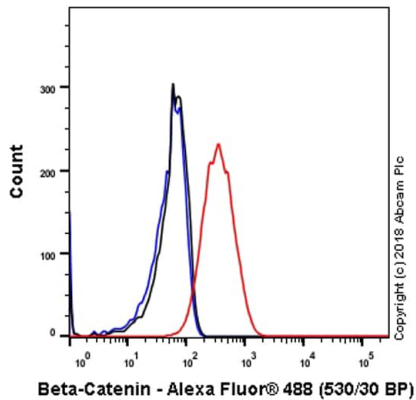
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon carcinoma tissue sections labeling beta Catenin with ab224803 at 1/100 dilution (1.20 µg/ml). Heat mediated antigen retrieval with sodium Citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Mainly membranous with nuclear staining on the human colon carcinoma, performed on a Leica Biosystems BOND™ RX instrument.

The section was incubated with ab224803 for 10 mins at room temperature.



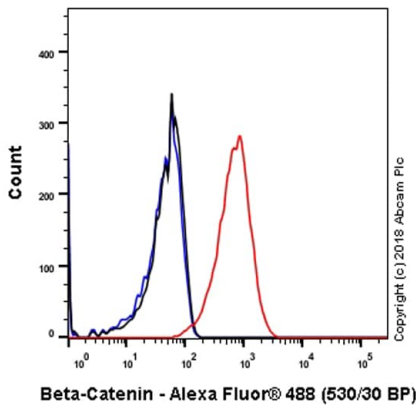
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human stomach adenocarcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



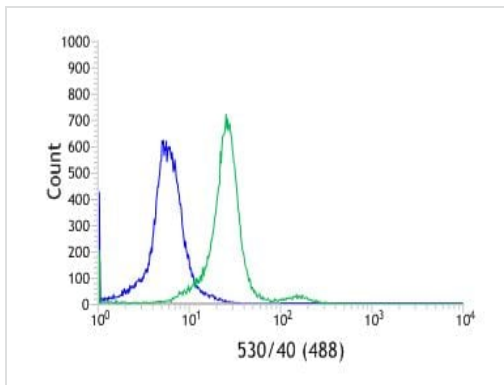
Flow Cytometry (Intracellular) - Anti-beta Catenin antibody [SP328] (ab224803)

Flow cytometry analysis of NIH/3T3 (mouse embryonic fibroblast) labeling beta Catenin with purified ab224803 at 1/200 dilution (0.495 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal IgG (**ab172730**) (black). Unlabeled control - Unlabelled cells (blue).



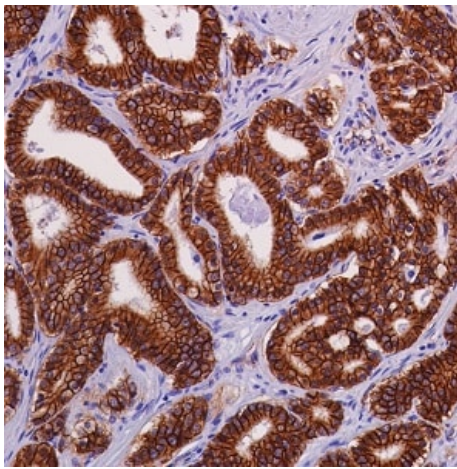
Flow Cytometry (Intracellular) - Anti-beta Catenin antibody [SP328] (ab224803)

Flow cytometry analysis of HeLa (human cervix adenocarcinoma epithelial cell) labeling beta Catenin with purified ab224803 at 1/200 dilution (0.495 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal IgG (**ab172730**) (black). Unlabeled control - Unlabelled cells (blue).



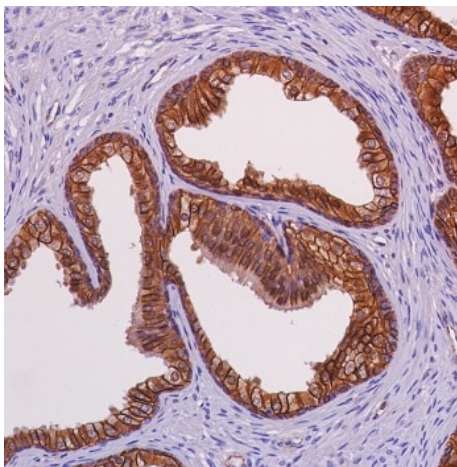
Flow Cytometry (Intracellular) - Anti-beta Catenin antibody [SP328] (ab224803)

Flow cytometric analysis of HEK-293 (human epithelial cell line from embryonic kidney) cell line labeling beta Catenin with ab224803 at 1/400 dilution (green) compared to a negative control of rabbit IgG (blue).



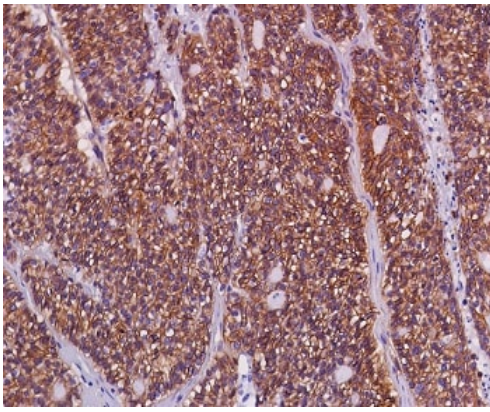
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human prostate adenocarcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



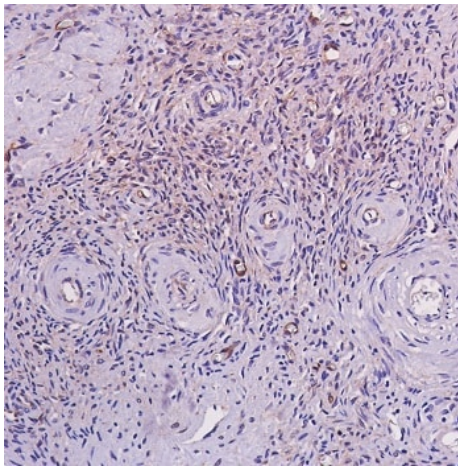
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human prostate tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



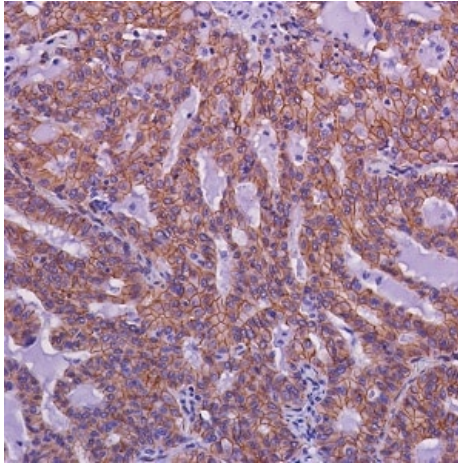
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human ovary adenocarcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



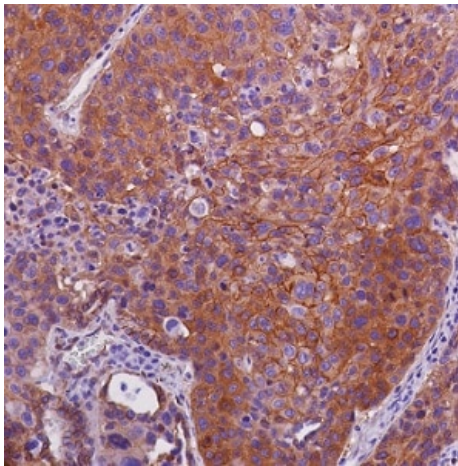
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human ovary tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



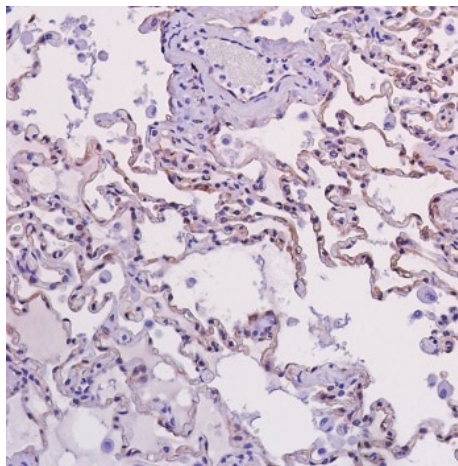
Formalin-fixed, paraffin-embedded human lung adenocarcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)



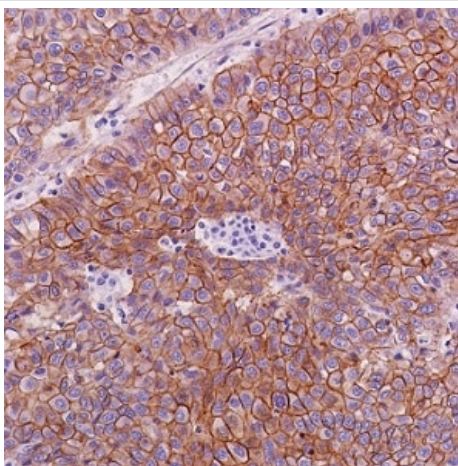
Formalin-fixed, paraffin-embedded human lung squamous carcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)



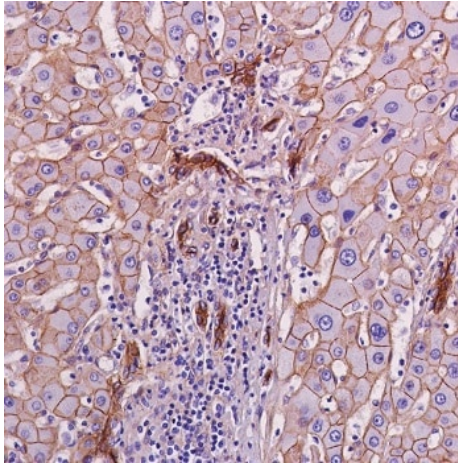
Formalin-fixed, paraffin-embedded human lung tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)



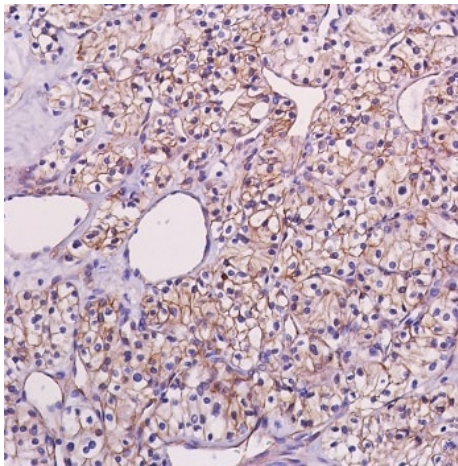
Formalin-fixed, paraffin-embedded human hepatocellular carcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)



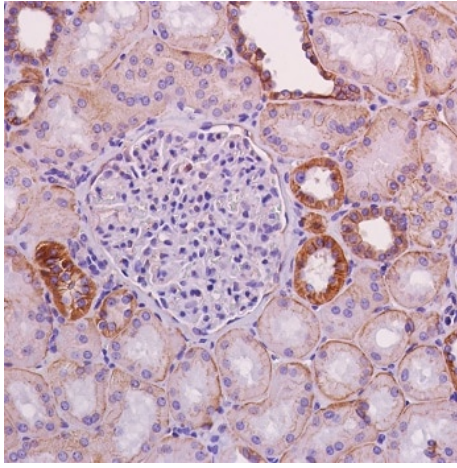
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human liver tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



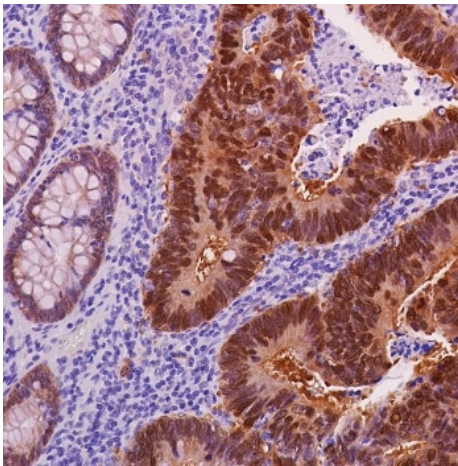
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human renal cell carcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



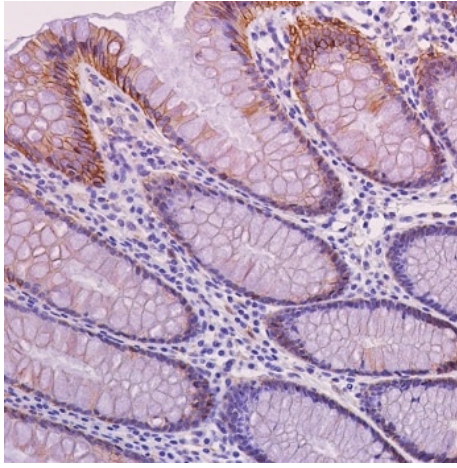
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human kidney tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



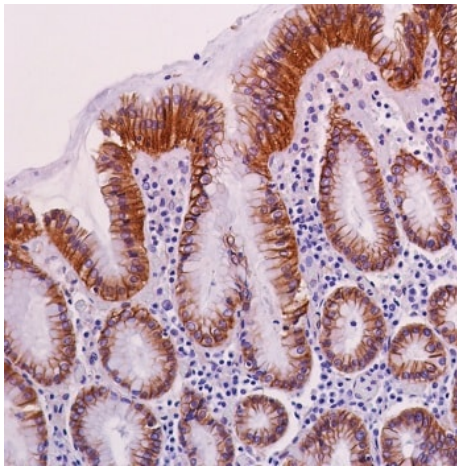
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human colon adenocarcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



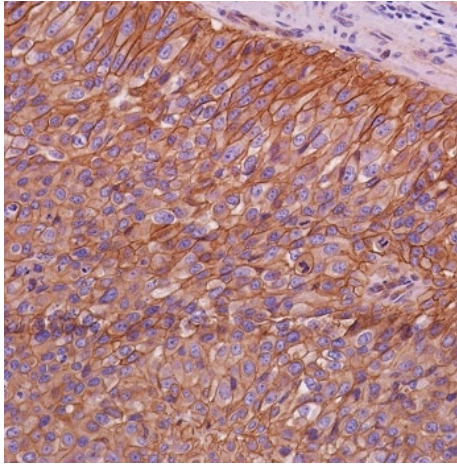
Formalin-fixed, paraffin-embedded human colon tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)



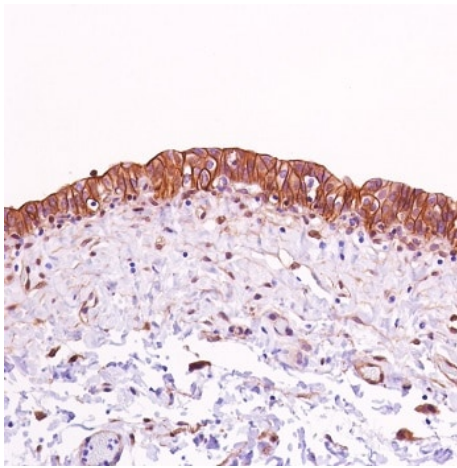
Formalin-fixed, paraffin-embedded human stomach tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)



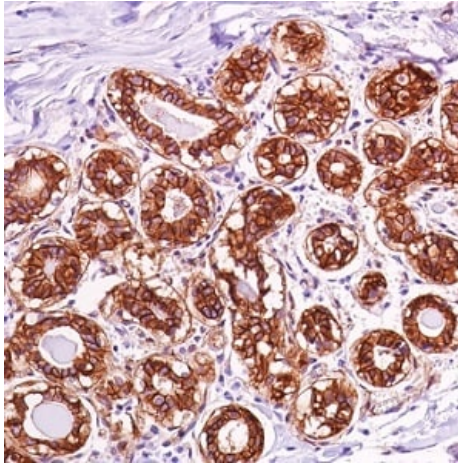
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human bladder transitional carcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



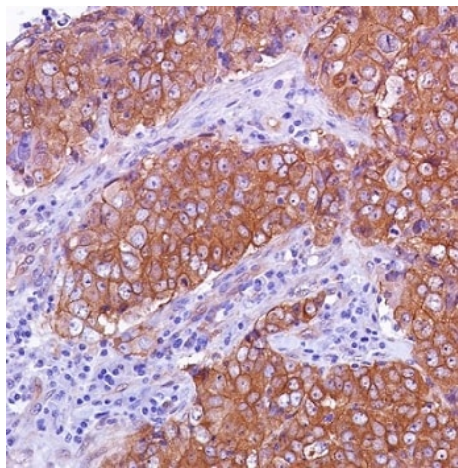
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human bladder tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human breast tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-beta Catenin antibody [SP328] (ab224803)

Formalin-fixed, paraffin-embedded human breast ductal carcinoma tissue stained for beta Catenin with ab224803 at 1/400 dilution in immunohistochemical analysis.

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