SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-APC antibody

SL3680R

Product Name:	APC
Chinese Name:	腺瘤样息肉抗体
Alias:	Adenomatous Polyposis Coli; Adenomatous polyposis coli protein; APC_HUMAN; CC1; Deleted in polyposis 2.5; DP2; DP2.5; DP3; FAP; FPC; GS; Protein APC.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	312kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human APC:2751-2843/2843
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a tumor suppressor protein that acts as an antagonist of the Wnt signaling pathway. It is also involved in other processes including cell migration and adhesion, transcriptional activation, and apoptosis. Defects in this gene cause familial adenomatous polyposis (FAP), an autosomal dominant pre-malignant disease that usually progresses to malignancy. Disease-associated mutations tend to be clustered in a small region designated the mutation cluster region (MCR) and result in a truncated

	protein product. [provided by RefSeq]. **Function:** Tumor suppressor. Promotes rapid degradation of CTNNB1 and participates in Wnt signaling as a negative regulator. APC activity is correlated with its phosphorylation state. Activates the GEF activity of SPATA13 and ARHGEF4. Plays a role in hepatocyte growth factor (HGF)-induced cell migration. Required for MMP9 up-regulation via the JNK signaling pathway in colorectal tumor cells. Acts as a mediator of ERBB2-dependent stabilization of microtubules at the cell cortex. It is required for the localization of MACF1 to the cell membrane and this localization of MACF1 is critical for its function in microtubule stabilization. **Subunit:** Forms homooligomers and heterooligomers with APC2. Interacts with DIAPH1 and DIAPH2. Interacts withPDZ domains of DLG1 and DLG3. Associates with catenins. Binds axin. Interacts with ARHGEF4 (via N-terminus). Interacts with MAPRE1 (viaC-terminus); probably required for APC targeting to the growingmicrotubule plus ends. Interacts with MAPRE2 and MAPRE3 (viaC-terminus). Found in a complex consisting of ARHGEF4, APC andCTNNB1. Interacts with SCRIB; may mediate APC targeting to adherensjunctions of epithelial cells. Interacts with SPATA13 (viaN-terminus and SH3 domain). Interacts with ASAP1 (via SH3 domain). Found in a complex composed of MACF1, APC, AXIN1, CTNNB1 and GSK3B. Interacts at the cell membrane with FAM123A and FAM123B (via ARM repeats). **Subcellular Location:** Cell junction, adherens junction. Cytoplasm, cytoskeleton. Cell projection, lamellipodium. Cell projection, ruffle membrane. Cytoplasm. Cell membrane. Note=Associated with the microtubule network at the growing distal tip of microtubules. Accumulates in the lamellipodium and ruffle membrane in response to hepatocyte growth factor (HGF) treatment. The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosophorylated form to the cell membrane. **Tissue Specificity:** Expressed in a variety of tissues. **Post-translational modifications:** Phosphorylated by GSK3B. Ubiquitinated, leading to its degradation by the proteasome. Ubiquitination is facilitated by Axin. Deubiquitinated by ZRANB1/TRABID. **DISEASE:** Familial adenomatous polyposis (FAP) [MIM:175100]: A cancer predisposition syndrome characterized by adenomatous polyps of the colon and rectum, but also of upper gastrointestinal tract (ampullary, duodenal and gastric adenomas). This is a viciously premalignant disease with one or more polyps progressing through dysplasia to malignancy in untreated gene carriers with a median age at diagnosis of 40 years.

Note=The disease is caused by mutations affecting the gene represented in this entry.
Hereditary desmoid disease (HDD) [MIM:135290]: Autosomal dominant trait with 100% penetrance and possible variable expression among affected relatives. HDD patients show multifocal fibromatosis of the paraspinal muscles, breast, occiput, arms, lower ribs, abdominal wall, and mesentery. Desmoid tumors appears also as a complication of familial adenomatous polyposis. Note=The disease is caused by mutations affecting the gene represented in this entry.
Medulloblastoma (MDB) [MIM:155255]: Malignant, invasive embryonal tumor of the cerebellum with a preferential manifestation in children. Note=The gene represented in this entry may be involved in disease pathogenesis.
Mismatch repair cancer syndrome (MMRCS) [MIM:276300]: Autosomal dominant disorder characterized by malignant tumors of the brain associated with multiple colorectal adenomas. Skin features include sebaceous cysts, hyperpigmented and cafe au lait spots. Note=The disease is caused by mutations affecting the gene represented in this entry.
Gastric cancer (GASC) [MIM:613659]: A malignant disease which starts in the stomach, can spread to the esophagus or the small intestine, and can extend through the stomach wall to nearby lymph nodes and organs. It also can metastasize to other parts of the body. The term gastric cancer or gastric carcinoma refers to adenocarcinoma of the stomach that accounts for most of all gastric malignant tumors. Two main histologic types are recognized, diffuse type and intestinal type carcinomas. Diffuse tumors are poorly differentiated infiltrating lesions, resulting in thickening of the stomach. In contrast, intestinal tumors are usually exophytic, often ulcerating, and associated with intestinal metaplasia of the stomach, most often observed in sporadic disease. Note=The gene represented in this entry may be involved in disease pathogenesis.
Hepatocellular carcinoma (HCC) [MIM:114550]: A primary malignant neoplasm of epithelial liver cells. The major risk factors for HCC are chronic hepatitis B virus (HBV) infection, chronic hepatitis C virus (HCV) infection, prolonged dietary aflatoxin exposure, alcoholic cirrhosis, and cirrhosis due to other causes. Note=The gene represented in this entry may be involved in disease pathogenesis.

Similarity:
Belongs to the adenomatous polyposis coli (APC) family.
Contains 7 ARM repeats.

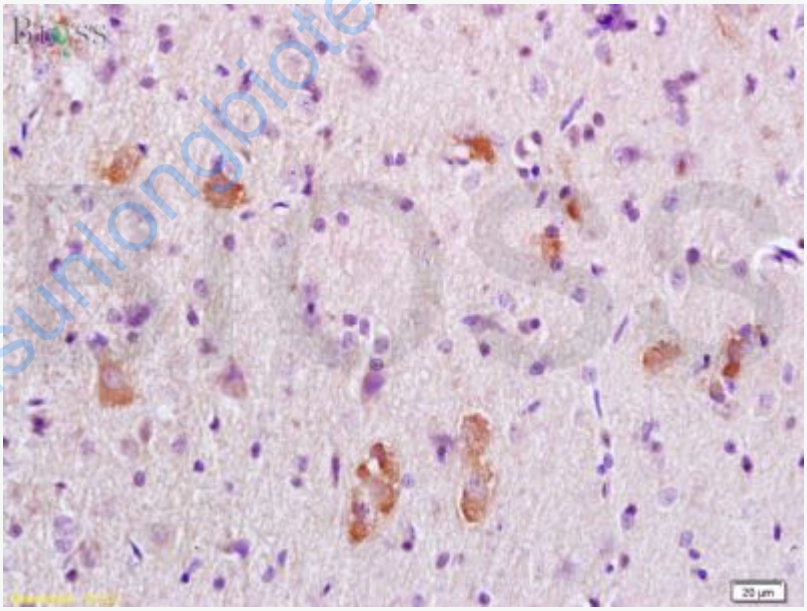
SWISS:
P25054

Gene ID:
324

Database links:

Entrez Gene: 324Human

Entrez Gene: 11789Mouse

	Entrez Gene: 24205Rat Omim: 611731Human SwissProt: P25054Human SwissProt: Q61315Mouse SwissProt: P70478Rat Unigene: 158932Human Unigene: 384171Mouse Unigene: 88057Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-APC/Adenomatous Polyposis Coli Polyclonal Antibody,

	Unconjugated(SL3680R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining