

APC Polyclonal Antibody

Catalog # AP68441

Product Information

Application	WB, IHC-P, IF
Primary Accession	P25054
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	311646

Additional Information

Gene ID	324
Other Names	APC; DP2.5; Adenomatous polyposis coli protein; Protein APC; Deleted in polyposis 2.5
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	APC (HGNC:583)
Synonyms	DP2.5
Function	<p>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. Associates with both microtubules and actin filaments, components of the cytoskeleton (PubMed:17293347). Plays a role in mediating the organization of F- actin into ordered bundles (PubMed:17293347). Functions downstream of Rho GTPases and DIAPH1 to selectively stabilize microtubules (By similarity). 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.</p>

Cellular 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 (PubMed:19632184) MAPRE1 may be required for targeting to the growing microtubule plus ends (PubMed:19632184). Accumulates in the lamellipodium and ruffle membrane in response to hepatocyte growth factor (HGF) treatment (PubMed:19151759). The MEMO1-RHOA-DIAPH1 signaling pathway controls localization of the phosphorylated form to the cell membrane (PubMed:20937854).

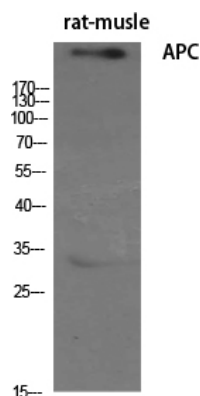
Tissue Location

Expressed in a variety of tissues: brain, small intestine, colon, thymus, skeletal muscle, heart, prostate, lung, spleen, ovary, testis kidney, placenta, blood and liver (PubMed:21643010, PubMed:27217144). Isoform 1A: Very strongly expressed in brain but has relatively low expression levels in other tissues (PubMed:19527921, PubMed:21643010, PubMed:27217144). Isoform 1B: Predominant form in all tissues except for brain, including gastric mucosa and blood (PubMed:19527921, PubMed:21643010, PubMed:27217144)

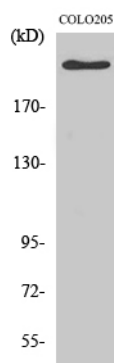
Background

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.

Images



Western Blot analysis of various cells using APC Polyclonal Antibody diluted at 1 : 500



Western Blot analysis of COLO205 cells using APC Polyclonal Antibody diluted at 1 : 500