

## APC (pS2054) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51637

## **Specification**

## APC (pS2054) Antibody - Product Information

Application WB, E
Primary Accession P25054
Reactivity Human

Reactivity
Host
Clonality
Human, Mouse, Rat
Rabbit
Polyclonal

Calculated MW 310 KDa

## APC (pS2054) Antibody - Additional Information

Gene ID 324

#### **Other Names**

Adenomatous polyposis coli protein, Protein APC, Deleted in polyposis 25, APC, DP25

### **Dilution**

WB~~1:1000 E~~N/A

### **Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

### Storage

Store at -20 °C. Stable for 12 months from date of receipt

## APC (pS2054) Antibody - Protein Information

Name APC (HGNC:583)

Synonyms DP2.5

## **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. Associates with both microtubules and actin filaments, components of the cytoskeleton (PubMed:<a href="http://www.uniprot.org/citations/17293347" target="\_blank">17293347</a>). Plays a role in mediating the organization of F- actin into ordered bundles (PubMed:<a href="http://www.uniprot.org/citations/17293347" target="\_blank">17293347</a>). 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.

### **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)

## APC (pS2054) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# APC (pS2054) Antibody - Images

## APC (pS2054) Antibody - 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.

### APC (pS2054) Antibody - References

Joslyn G., et al. Cell 66:601-613(1991). Kinzler K.W., et al. Science 253:661-665(1991). Kawasaki Y., et al. Science 289:1194-1197(2000). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Miki Y., et al. Cancer Res. 52:643-645(1992).