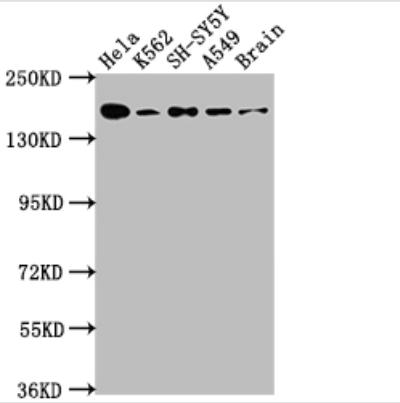
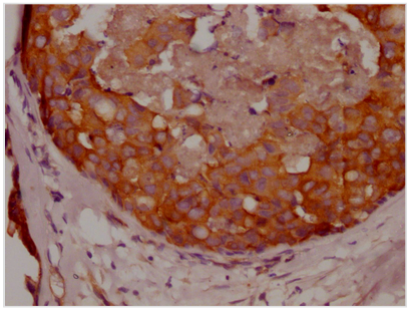
APC Recombinant Monoclonal Antibody

Product Code	CSB-RA951649A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P25054
Immunogen	A synthesized peptide derived from human APC
Species Reactivity	Human, Rat
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Neuroscience; Cancer; Cardiovascular; Cell biology; Stem cells
Gene Names	APC
Clone No.	5F2

Image



Western Blot
Positive WB detected in: Hela whole cell lysate, K562 whole cell lysate, SH-SY5Y whole cell lysate, A549 whole cell lysate, Rat Brain whole cell lysate
All lanes: APC antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 312, 301, 309 kDa
Observed band size: 160 kDa



IHC image of CSB-RA951649A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

CUSABIO initiated an immune response by immunizing an animal with a human APC-derived peptide. B cells were then isolated from the immunized animal and fused with myeloma cells, resulting in the formation of hybridoma cells. Through rigorous screening, a single hybridoma cell clone that produces APC-specific antibodies was meticulously chosen. The selected hybridoma cells underwent RNA extraction, followed by amplification of the APC antibody-encoding genes using reverse transcription PCR. These amplified genes were subsequently cloned into an expression vector and introduced into a suitable host system for efficient antibody expression. The resulting APC recombinant monoclonal antibodies were purified from the cell culture supernatant using affinity chromatography. To ensure their quality, the binding specificity and affinity of the recombinant monoclonal APC antibody were extensively validated using three techniques including ELISA, WB, and IHC. Importantly, this antibody specifically recognizes both human and rat APC proteins.