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Mouse Monoclonal Antibody to CTNNA1

Purified Mouse Monoclonal Antibody
Catalog # AO2373a

Product Information

Application	WB, IHC, E
Primary Accession	P35221
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8B6C1
Isotype	Mouse IgG1
Calculated MW	100071
Description	CTNNA1 (Catenin (Cadherin-Associated Protein), Alpha 1, 102kDa) is a Protein Coding gene. Diseases associated with CTNNA1 include diffuse gastric cancer and acquired thrombocytopenia. Among its related pathways are Signaling by GPCR and Developmental Biology. GO annotations related to this gene include poly(A) RNA binding and actin filament binding. An important paralog of this gene is CTNNA3.;
Immunogen	Purified recombinant fragment of human CTNNA1 (AA: 371-574) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide
Application Note	ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000;

Additional Information

Gene ID	1495
Other Names	CAP102
Dilution	WB~~1:1000 IHC~~1:100~500 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Monoclonal Antibody to CTNNA1 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

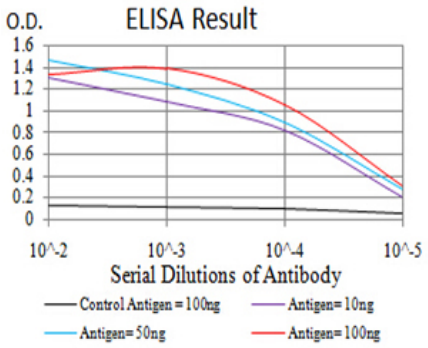
Name	CTNNA1 (HGNC:2509)

Function	Associates with the cytoplasmic domain of a variety of cadherins. The association of catenins to cadherins produces a complex which is linked to the actin filament network, and which seems to be of primary importance for cadherins cell-adhesion properties. Can associate with both E- and N-cadherins. Originally believed to be a stable component of E-cadherin/catenin adhesion complexes and to mediate the linkage of cadherins to the actin cytoskeleton at adherens junctions. In contrast, cortical actin was found to be much more dynamic than E-cadherin/catenin complexes and CTNNA1 was shown not to bind to F-actin when assembled in the complex suggesting a different linkage between actin and adherens junctions components. The homodimeric form may regulate actin filament assembly and inhibit actin branching by competing with the Arp2/3 complex for binding to actin filaments. Involved in the regulation of WWTR1/TAZ, YAP1 and TGFB1- dependent SMAD2 and SMAD3 nuclear accumulation (By similarity). May play a crucial role in cell differentiation.
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P26231}. Cell junction, adherens junction. Cell membrane {ECO:0000250|UniProtKB:P26231}; Peripheral membrane protein; Cytoplasmic side {ECO:0000250|UniProtKB:P26231}. Cell junction Cytoplasm {ECO:0000250|UniProtKB:Q9PVF8}. Nucleus. Note=Found at cell-cell boundaries and probably at cell-matrix boundaries. {ECO:0000250|UniProtKB:P26231}
Tissue Location	[Isoform 1]: Ubiquitously expressed in normal tissues.

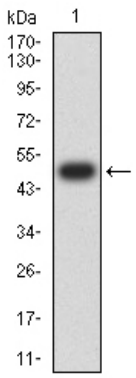
References

1.Cell Cycle. 2014;13(15):2334-9. ; 2.J Pathol. 2013 Mar;229(4):621-9. ;

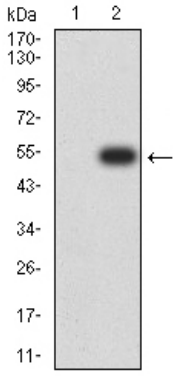
Images



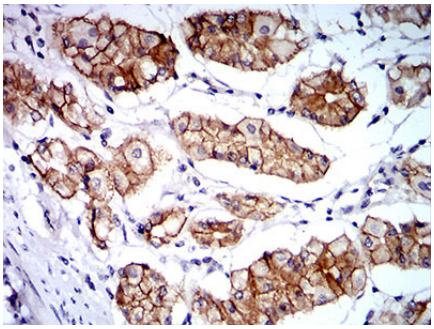
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Western blot analysis using CTNNA1 mAb against human CTNNA1 (AA: 371-574) recombinant protein. (Expected MW is 48.8 kDa)



Western blot analysis using CTNNA1 mAb against HEK293 (1) and CTNNA1 (AA: 371-574)-hIgGFc transfected HEK293 (2) cell lysate.



Immunohistochemical analysis of paraffin-embedded stomach tissues using CTNNA1 mouse mAb with DAB staining.