

Mouse Monoclonal Antibody to ANAPC10

Purified Mouse Monoclonal Antibody

Catalog # AO2469a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q9UM13
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8F1D10
Isotype	Mouse IgG1
Calculated MW	21252
Description	ANAPC10 is a core subunit of the anaphase-promoting complex (APC), or cyclosome, a ubiquitin protein ligase that is essential for progression through the cell cycle. APC initiates sister chromatid separation by ubiquitinating the anaphase inhibitor securin (PTTG1; MIM 604147) and triggers exit from mitosis by ubiquitinating cyclin B (CCNB1; MIM 123836), the activating subunit of cyclin-dependent kinase-1 (CDK1; MIM 116940) (summary by Wendt et al., 2001 [PubMed 11524682]).;
Immunogen	Purified recombinant fragment of human ANAPC10 (AA: 1-185) 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; ICC: 1/200 - 1/1000; FCM: 1/200 - 1/400

Additional Information

Gene ID	10393
Other Names	DOC1; APC10
Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A 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 ANAPC10 is for research use only and not for use in diagnostic or therapeutic procedures.

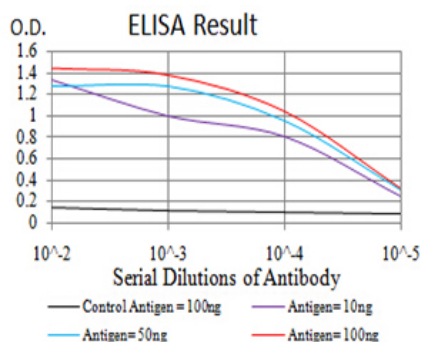
Protein Information

Name	ANAPC10
Synonyms	APC10
Function	Component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through the cell cycle (PubMed:18485873, PubMed:27120157, PubMed:27509861). APC/C acts by mediating ubiquitination and subsequent degradation of target proteins: it mainly mediates the formation of 'Lys-11'-linked polyubiquitin chains and, to a lower extent, the formation of 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains (PubMed:18485873). APC/C catalyzes assembly of branched 'Lys-11'-/'Lys- 48'-linked branched ubiquitin chains on target proteins (PubMed:29033132). APC/C is activated by CDC20 in the metaphase/anaphase transition of cell cycle, targeting the degradation of cyclin B and securin (PubMed:27120157, PubMed:27509861). APC/C is regulated by the mitotic checkpoint complex (MCC), which inhibits APC/C and delays chromosome segregation (PubMed:27509861).

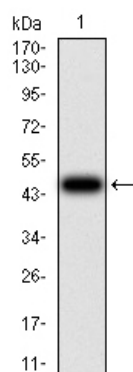
References

1.BMC Cell Biol. 2004 May 16;5:20. ; 2.Nat Struct Biol. 2001 Sep;8(9):784-8.;

Images

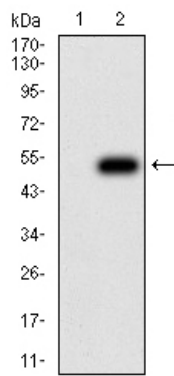


Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

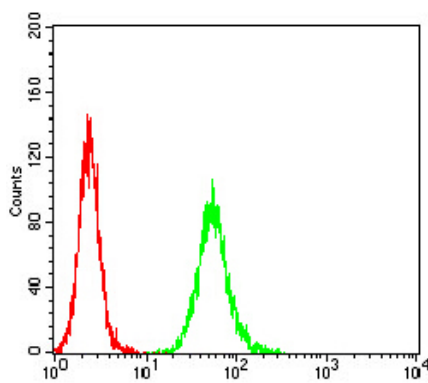
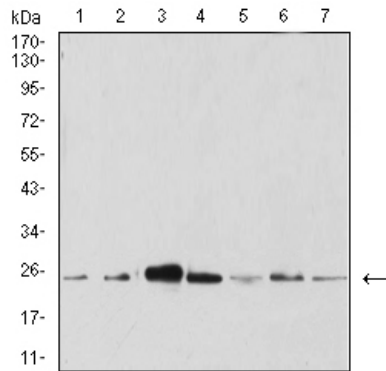


Western blot analysis using ANAPC10 mAb against human ANAPC10 (AA: 1-185) recombinant protein. (Expected MW is 47.2 kDa)

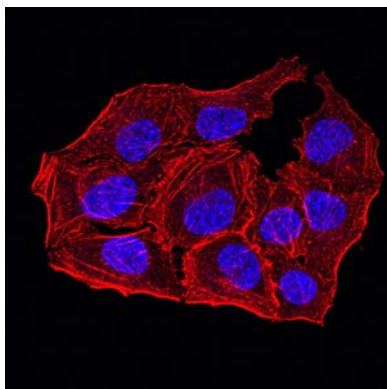
Western blot analysis using ANAPC10 mAb against HEK293 (1) and ANAPC10 (AA: 1-185)-hIgGfc transfected HEK293 (2) cell lysate.



Western blot analysis using ANAPC10 mouse mAb against HeLa (1), MCF-7 (2), SK-Br-3 (3), A431 (4), HEK293 (5), A549 (6), and SPC-A-1 (7) cell lysate.

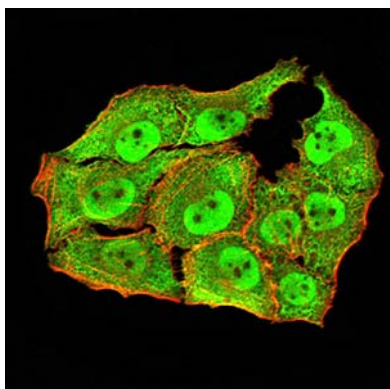


Flow cytometric analysis of HeLa cells using ANAPC10 mouse mAb (green) and negative control (red).



Immunofluorescence analysis of HeLa cells using ANAPC10 mouse mAb. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

Immunofluorescence analysis of HeLa cells using ANAPC10 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher



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