abcam

ab233753

Anti-APC2 antibody [3A2G2]

Mouse Monoclonal APC2 antibody. Suitable for Flow Cyt, WB, IHC-P, ICC/IF and reacts with Human samples. Cited in 4 publications. Immunogen corresponding to Recombinant Fragment Protein within Human APC2 aa 2000 to C-terminus.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human APC2 aa 2000 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link O95996
Clone number	3A2G2
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Target data

See full target information APC2

Function	Stabilizes microtubules and may regulate actin fiber dynamics through the activation of Rho family GTPases (PubMed:25753423). May also function in Wnt signaling by promoting the rapid degradation of CTNNB1 (PubMed:10021369, PubMed:11691822, PubMed:9823329).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	APC2 also known as Adenomatous Polyposis Coli 2 is a critical regulator of cell function primarily involved in the cell cycle and stability of beta-catenin. This protein has a molecular mass of approximately 260 kDa and is mainly expressed in neural tissue and embryonic development stages. APC2 shares structural similarities with APC1 including the presence of armadillo repeats which facilitate protein-protein interactions necessary for its function.
Biological function summary	APC2 interacts with cytoskeletal networks and contributes to cellular architecture and mobility. It is a component of the WNT signaling cascade mainly directing the degradation of beta-catenin which prevents irregular cell proliferation. APC2 forms part of the destruction complex working alongside proteins like Axin and GSK3β to regulate beta-catenin levels within cells.
Pathways	APC2 plays a significant role in the WNT signaling pathway important for cellular growth and communication. Through this pathway APC2 interacts with various proteins such as beta-catenin and GSK3β controlling their activity and stability. Its function in this pathway impacts gene expression which is critical for processes like embryonic development and adult tissue homeostasis.
Associated diseases and disorders	Mutations or dysregulation of APC2 have been associated with colorectal cancer and neural developmental anomalies. These conditions often involve aberrations in the WNT signaling pathway where APC2 fails to regulate beta-catenin adequately. Research has linked APC2 with APC1 where both proteins contribute to oncogenic processes when their regulatory roles in beta-catenin degradation are compromised.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

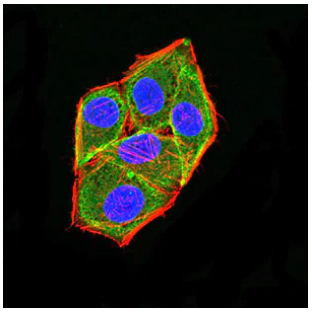
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

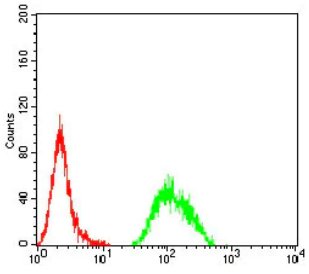
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-APC2 antibody [3A2G2] (ab233753)

APC2 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-APC2 antibody

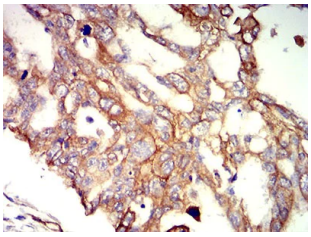
HeLa (human prostate adenocarcinoma cell line) cells stained for APC2 (green) using ab233753 at 1/200 dilution in ICC/IF.
Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



Flow Cytometry - Anti-APC2 antibody [3A2G2] (ab233753)

APC2 Flow Cytometry staining using mouse Anti-APC2 antibody

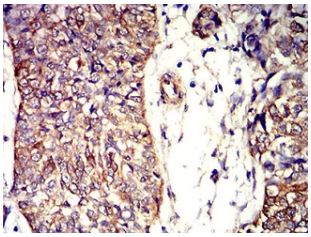
Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labelling APC2 with ab233753 at 1/200 dilution (green) compared with a negative control (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-APC2 antibody [3A2G2] (ab233753)

APC2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-APC2 antibody

Paraffin-embedded human ovarian cancer tissue stained for APC2 using ab233753 at 1/200 dilution in immunohistochemical analysis. DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-APC2 antibody [3A2G2] (ab233753)

APC2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-APC2 antibody

Paraffin-embedded human bladder cancer tissue stained for APC2 using ab233753 at 1/200 dilution in immunohistochemical analysis. DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.