

Rabbit anti-Human APC1/ANAPC1 Polyclonal Antibody | anti-APC1/ANAPC1 antibody

Anti-APC1/ANAPC1 Antibody Picoband

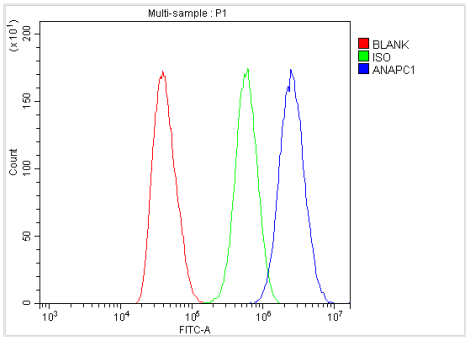
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127180	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

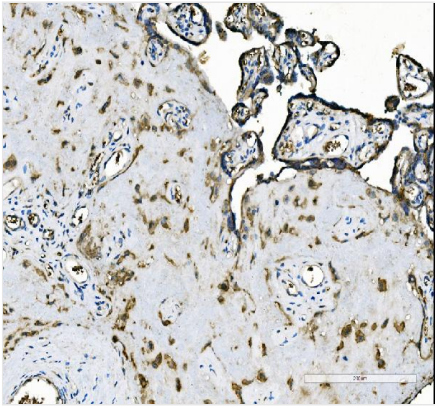
APC1/ANAPC1; Polyclonal Antibody; Anti-APC1/ANAPC1 Antibody Picoband; Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody; KS6B1_HUMAN antibody; p70 alpha antibody; P70 beta 1 antibody; p70 ribosomal S6 kinase alpha antibody; p70 ribosomal S6 kinase beta 1 antibody; p70 S6 kinase alpha antibody; P70 S6 Kinase antibody; p70 S6 kinase alpha 1 antibody; p70 S6 kinase alpha 2 antibody; p70 S6K antibody; p70 S6K-alpha antibody; p70 S6KA antibody; p70(S6K) alpha antibody; p70(S6K)-alpha antibody; p70-alpha antibody; p70-S6K 1 antibody; p70-S6K antibody; P70S6K antibody; P70S6K1 antibody; p70S6Kb antibody; PS6K antibody; Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody; Ribosomal protein S6 kinase beta 1 antibody; Ribosomal protein S6 kinase beta-1 antibody; Ribosomal protein S6 kinase I antibody; RPS6KB1 antibody; S6K antibody; S6K-beta-1 antibody; S6K1 antibody; Serine/threonine kinase 14 alpha antibody; Serine/threonine-protein kinase 14A antibody; STK14A antibody; anti-APC1/ANAPC1 antibody

PRODUCT SPECIFICATIONS

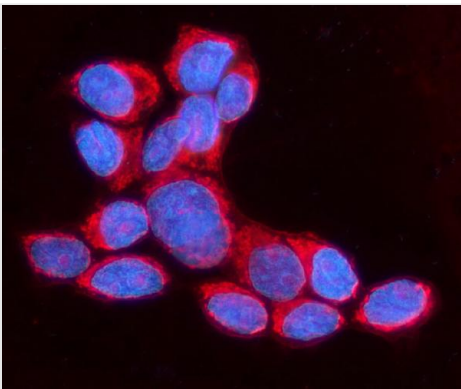
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Specificity	Expressed in all tissues.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-APC1/ANAPC1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human APC1/ANAPC1 recombinant protein (Position: M1-E197). Human ANAPC1 shares 91.9% amino acid (aa) sequence identity with mouse ANAPC1.
Subcellular Localization	Cytoplasm, Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross reactivity with other proteins.
Protein Function	Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



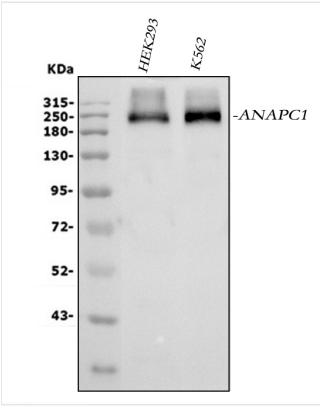
FCM/FACS (Flow Cytometry)
Figure 4. Flow Cytometry analysis of A549 cells using anti-APC1/ANAPC1 antibody (AAA127180). Overlay histogram showing A549 cells stained with AAA127180 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APC1/ANAPC1 Antibody (AAA127180, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)
Figure 2. IHC analysis of APC1/ANAPC1 using anti-APC1/ANAPC1 antibody (AAA127180). APC1/ANAPC1 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-APC1/ANAPC1 Antibody (AAA127180) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IF (Immunofluorescence)
Figure 3. IF analysis of APC1/ANAPC1 using anti-APC1/ANAPC1 antibody (AAA127180). APC1/ANAPC1 was detected in an immunocytochemical section of MCF-7 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-APC1/ANAPC1 Antibody (AAA127180) overnight at 4 degree C. DyLight594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)
Figure 1. Western blot analysis of APC1/ANAPC1 using anti-APC1/ANAPC1 antibody (AAA127180). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HEK293 whole cell lysates, Lane 2: human K562 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-APC1/ANAPC1 antigen affinity purified polyclonal antibody (#AAA127180) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for APC1/ANAPC1 at approximately 240 kDa. The expected band size for APC1/ANAPC1 is at 217 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-APC1/ANAPC1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-APC1/ANAPC1 antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins

References	1. Ajeawung, N. F., Nguyen, T. T. M., Lu, L., Kucharski, T. J., Rousseau, J., Molidperee, S., Atienza, J., Gamache, I., Jin, W., Plon, S. E., Lee, B. H., Teodoro, J. G., Wang, L. L., Campeau, P. M. Mutations in ANAPC1, encoding a scaffold subunit of the anaphase-promoting complex, cause Rothmund-Thomson syndrome type 1. <i>Am. J. Hum. Genet.</i> 105: 625-630, 2019. 2. Jorgensen, P. M., Graslund, S., Betz, R., Stahl, S., Larsson, C., Hoog, C. Characterisation of the human APC1, the largest subunit of the anaphase-promoting complex. <i>Gene</i> 262: 51-59, 2001. 3. Yang, Y., Kim, A. H., Yamada, T., Wu, B., Bilimoria, P. M., Ikeuchi, Y., de la Iglesia, N., Shen, J., Bonni, A. A Cdc20-APC ubiquitin signaling pathway regulates presynaptic differentiation. <i>Science</i> 326: 575-578, 2009.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	12056971
NCBI GeneID	64682
NCBI Accession #	NP_073153.1
NCBI GenBank Nucleotide #	NM_022662.3
UniProt Accession #	Q9H1A4; Q2M3H8; Q9BSE6; Q9H8D0
Molecular Weight	216,500 Da
NCBI Official Full Name	anaphase-promoting complex subunit 1
NCBI Official Synonym Full Names	anaphase promoting complex subunit 1
NCBI Official Symbol	ANAPC1
NCBI Official Synonym Symbols	APC1; MCPR; TSG24
NCBI Protein Information	anaphase-promoting complex subunit 1; cyclosome subunit 1; mitotic checkpoint regulator; testis-specific gene 24 protein; anaphase-promoting complex 1 (meiotic checkpoint regulator)
UniProt Protein Name	Anaphase-promoting complex subunit 1
UniProt Gene Name	ANAPC1
UniProt Synonym Gene Names	TSG24; APC1
UniProt Entry Name	APC1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.