

Certificate of Analysis

Product: Affinity Purified Anti-Human APC1 pS355 (Rabbit)

Code: 600-401-856

Lot #: 14837

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 0.55 mg/ml (by UV absorbance at 280 nm)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

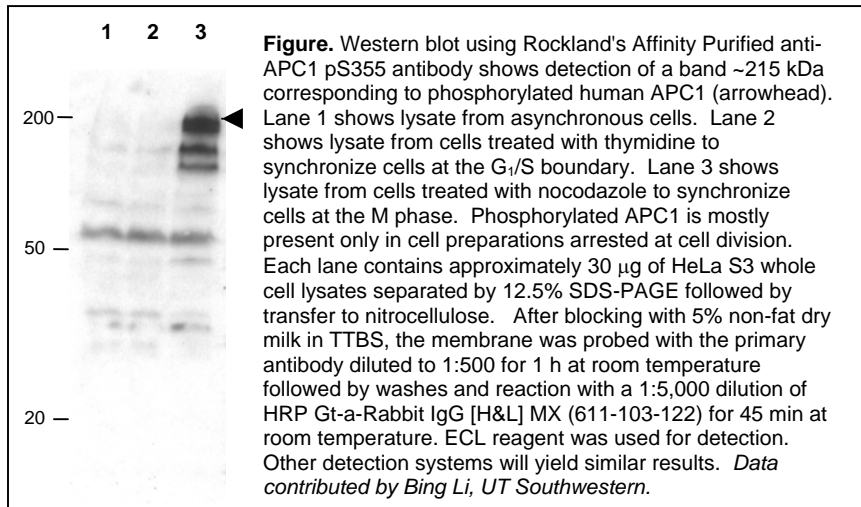
Storage Conditions: Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

Background: APC1 (also known as Anaphase promoting complex subunit 1, Cyclosome subunit 1, Protein Tsg24, Mitotic checkpoint regulator and ANAPC1) is 1 of at least 11 subunits of the anaphase-promoting complex (APC), which functions at the metaphase-to-anaphase transition of the cell cycle and is regulated by spindle checkpoint proteins. The APC is an E3 ubiquitin ligase that targets cell cycle regulatory proteins for degradation by the proteasome, thereby allowing progression through the cell cycle.

Application Note(s): This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band ~ 215 kDa in size corresponding to APC1 by western blotting in the appropriate cell lysate or extract.

Recommended Dilutions:

ELISA	1:10,000 - 1:40,000
WESTERN BLOT	1:200 - 1:2,000
IF MICROSCOPY	User Optimized
OTHER APPLICATIONS	User Optimized



Purity and Specificity: This product is an affinity purified antibody produced by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. This antibody is specific for phosphorylated human APC1 protein at the pS355 residue. A BLAST analysis was used to suggest reactivity with this protein from human, mouse, dog, rat, and bovine based on 100% homology for the immunogen sequence. Cross reactivity with APC1 protein from chimpanzee and chicken is expected as the sequence of the immunogen only varies by one amino acid in from these sources (89% homology). Cross reactivity with APC1 homologues from other sources has not been determined. Minimal reactivity is expected with the non-phosphorylated form of the protein.

Relevant Link(s): Swis-Prot [Q9H1A4](#) NCBI Link [NP_073153](#)

Protein Sequence: Human APC1, 1944 aa, predicted MW 216.5 kDa

1	msnfyeeertt	miaardlqef	vpfgrdhckh	hpnalnqlr	qlqpaselws	sdgaaglvgs
61	lqevtihekq	keswqlrkgy	seigedvdvd	eelyvagnmv	iwskgksksqa	lavykaftvd
121	spvqqalwcd	fiisqdksek	ayssnevekc	icilqsscscin	mhsiegkdyi	aslpfqvanv
181	wptkyglife	rsasshevpp	gspreplptm	fsmhpldei	tplvcksgsl	fgssrvqyvv
241	dhamkivfln	tdpsivmytd	avqnvhsvwt	lrrvkseen	vvlkfseqgg	tpqnvatsss
301	ltahlrlsk	gdspvtspfq	nyssihsqsr	stsspslhr	spsismaal	srahspalgv
361	hsfsgvqrfn	isshnqspkr	hsishspnsn	sngsflapet	epivpelcid	hlwtetitni
421	reknsqaskv	fitsdlcgqk	flcflvesql	qlrcvfkfes	ndktqlifgs	vtnipakdaa
481	pvekidtmlv	legsgnlvly	tgvvrvgkvf	ipglpapslt	msntmprpst	pldgvstpkp
...						
1441	lseielpcse	dlnletlsqa	hvyiiaacl	slgfrfagse	nlsafnclhk	fakdfmtyls
1501	apnasvtgph	nletclsvvl	islamvmags	gnlklqlcr	flhmktggem	nygfhlahhm
1561	algllflggg	rystslnss	iaallcalyp	hfpahstdnr	yhlqalrhly	vlaaeprllv
1621	pvdvdtntpc	yallevtykg	tqweyqtk	lmaptilpel	hllkqikvkg	prywellidl
1681	skgtqhlksi	lskdgvlyvk	lragqlsyke	dpmgwqslla	qtvanmseaa	rafkpetisa
1741	fitsdpallsf	aeyfckptvn	mgqkqeidl	fssvlyecvt	qetpemplpay	iamdqairrl
1801	grremsetse	lwqiklvlef	fssrshqerl	qnhpkrglfm	nseflpvvkc	tidntldqwl
1861	qvggdmcvha	ylsgqplees	qlsmlaclfv	yhsvpapqhl	ppiglegsts	faellfkfkq
1921	lkmpvrallr	lapllgnpq	pmvm			

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 351-359 of Human Apc1 protein.

General References:

Jorgensen,P.M., Graslund,S., Betz,R., Stahl,S., Larsson,C. and Hoog,C. (2001) Characterization of the human APC1, the largest subunit of the anaphase-promoting complex. *Gene* **262** (1-2), 51-59.

Kraft C, Herzog F, Gieffers C, Mechtler K, Hagting A, Pines J, Peters JM. (2003) Mitotic regulation of the human anaphase-promoting complex by phosphorylation. *EMBO J.* **22**(24):6598-609.

Related Products:

#611-703-127	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
#611-132-122	IRDye800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
#MB-070	Blocking Buffer for Fluorescent Western Blotting
#KIA-003	MaxTag TM Anti-RABBIT IgG Kit for Immunoblotting
#MB-070	Blocking Buffer for Fluorescent Western Blotting

USDA Certification: All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

Note: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.