

## Datasheet for 600-401-877

**APC1 phospho S377 Antibody****Overview**

<b>Description:</b>	Anti-APC1 pS377 (RABBIT) Antibody - 600-401-877
<b>Item No.:</b>	600-401-877
<b>Size:</b>	100 µg
<b>Applications:</b>	ELISA, IHC, WB
<b>Reactivity:</b>	Human
<b>Host Species:</b>	Rabbit

**Product Details**

<b>Background:</b>	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.
<b>Synonyms:</b>	rabbit anti-APC1 pS377 Antibody, APC-1, APC 1, ANAPC1 antibody, Anaphase promoting complex subunit 1 antibody, Cyclosome subunit 1 antibody, MCPR antibody, Meiotic checkpoint regulator antibody
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**Target Details**

<b>Gene Name:</b>	ANAPC1
<b>Reactivity:</b>	Human
<b>PTM Specificity:</b>	Phosphorylation
<b>Immunogen Type:</b>	Conjugated Peptide

<b>Immunogen:</b>	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region surrounding pS377 of Human Apc1 protein.
<b>Purity/Specificity:</b>	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 pS377 residue. A BLAST analysis was used to suggest reactivity with this protein from human, dog, rat, and bovine based on 100% homology for the immunogen sequence. Cross reactivity with APC1 protein from mouse is expected, as this sequence show 90% homologous between human and mouse. Cross reactivity with APC1 homologues from other sources has not been determined. Minimal reactivity is expected with the non-phosphorylated form of the protein.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q9H1A4</a></li><li>• <a href="#">NCBI - 12056971</a></li><li>• <a href="#">GeneID - 64682</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, IHC, WB
<b>Application Note:</b>	This affinity purified antibody has been tested for use in ELISA, immunohistochemistry 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.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:2,000 - 1:10,000
<b>IHC:</b>	5.0 µg/ml
<b>WB:</b>	1:200 - 1:1,000

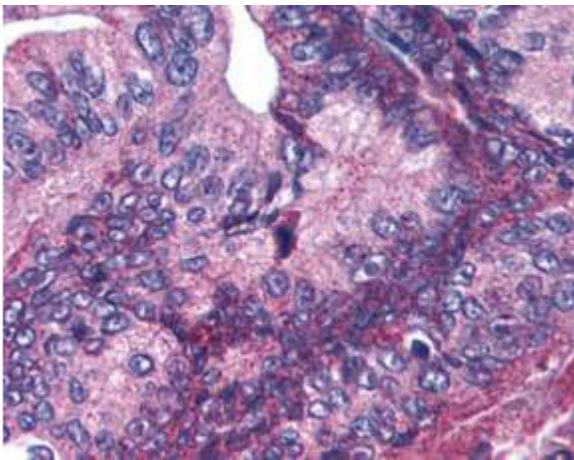
## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	0.21 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	None

## Shipping & Handling

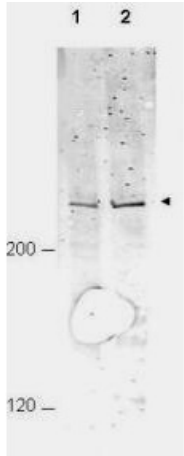
<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



### Immunohistochemistry

Rockland's affinity purified anti-APC1 pS377 antibody was used at 5.0µg/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows moderate positive cytoplasmic and occasional nuclear staining of pancreatic carcinoma cells at 60X. Tissue was formalin-fixed and paraffin embedded. The image shows localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.

**Western Blot**

Western blot using Rockland's Affinity Purified anti-APC1 pS377 antibody shows detection of a band ~215 kDa corresponding to phosphorylated human APC1 (arrowhead). Lane 1 shows lysate from asynchronous cells. Lane 2 shows lysate from cells treated with nocodazole. While some phosphorylated APC1 is present in untreated cell, the amount of phosphorylated protein is increased in cell preparations arrested in mitosis. Each lane contains approximately 30 ug of HeLa whole cell lysates, separated by 4-8% SDS-PAGE followed by transfer to nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,000 overnight at 4°C followed by washes and reaction with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] MX (611-132-122) for 45 min at room temperature. IRDye800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

**Disclaimer**

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. 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. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.