

Certificate of Analysis

Product: Affinity Purified Anti-APC1 pS377 [Rabbit]

Code: 600-401-877

Lot #: 16221

Size: 100 µg

Physical State: Liquid (sterile filtered)

Antibody Concentration: 1.13 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, 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.

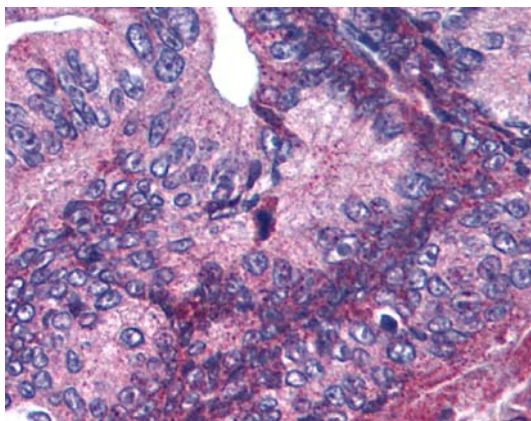
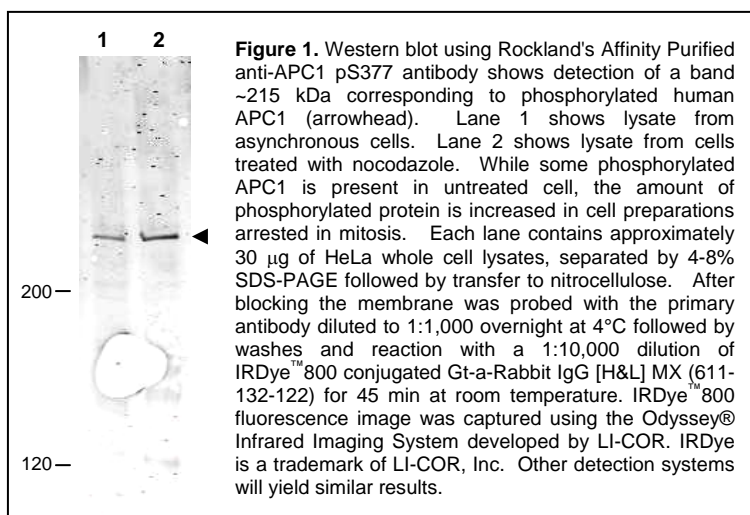


Figure 2. Immunohistochemistry. ROCKLAND's affinity purified anti-APC1 pS377 antibody was used at 5.0 µg/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows moderate positive cytoplasmic and occasional nuclear staining of pancreatic 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.*

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| Recommended Dilutions: | ELISA | 1:2,000 - 1:10,000 |
| | WESTERN BLOT | 1:200 - 1:1,000 |
| | IMMUNOHISTOCHEMISTRY | 5.0 µg/ml |
| | 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 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.

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

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 373-382 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:

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|------------------------------|---|
| #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 |

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.

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