

**Datasheet for 100-401-172****p27 Antibody****Overview**

|                      |                                          |
|----------------------|------------------------------------------|
| <b>Description:</b>  | Anti-p27 (RABBIT) Antibody - 100-401-172 |
| <b>Item No.:</b>     | 100-401-172                              |
| <b>Size:</b>         | 100 µL                                   |
| <b>Applications:</b> | WB                                       |
| <b>Reactivity:</b>   | Human                                    |
| <b>Host Species:</b> | Rabbit                                   |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | p27 Kip is a cyclin-dependent kinase inhibitor that shares a limited similarity with CDK inhibitor CDKN1A/p21. p27 binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state. |
| <b>Synonyms:</b>     | rabbit anti-p27 antibody, Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Format:</b>       | Antiserum                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

**Target Details**

|                        |                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>      | CDKN1B                                                                                                                                  |
| <b>Reactivity:</b>     | Human                                                                                                                                   |
| <b>Immunogen Type:</b> | Recombinant Protein                                                                                                                     |
| <b>Immunogen:</b>      | This antibody was prepared from whole rabbit serum produced by repeated immunizations with a full length recombinant human p27 protein. |

**Purity/Specificity:** This product was prepared from monospecific antiserum by delipidation and defibrination. Antiserum will specifically react with a p27 protein from human tissue. No reaction was observed against other related tumor suppressor proteins. No reactivity is observed with p27 from mouse. Reactivity against p27 from other species is unknown.

**Relevant Links:**

- [UniProtKB - P46527](#)
- [NCBI - 4757962](#)
- [GeneID - 1027](#)

## Application Details

**Tested Applications:** WB

**Application Note:** Anti-p27 has been tested in western blot. This antibody is suitable for use in ELISA, immunoprecipitation, co-immunoprecipitation and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~27 kDa in size corresponding to p27 by western blotting in the appropriate cell lysate or extract. Anti-p27 is suitable for the detection by immunoblot of human p27. No reactivity is observed with p27 from mouse. This antibody is suitable for immunoprecipitation of in vitro translated protein and cell lysates (C212, 3T3-L1) and will co-precipitate associated proteins. Optimal titers for other applications should be determined by the researcher.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**ELISA:** 1:10,000 - 1:40,000

**IP:** 1:100

**WB:** 1:1,000 - 1:4,000

## Formulation

**Physical State:** Liquid (sterile filtered)

**Concentration:** 80 mg/mL by Refractometry

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

**Preservative:** 0.01% (w/v) Sodium Azide

**Stabilizer:** None

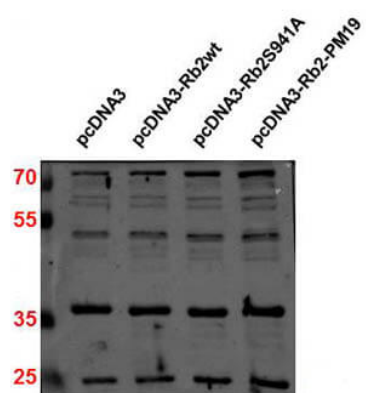
## Shipping & Handling

**Shipping Condition:** Dry Ice

**Storage Condition:** 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.

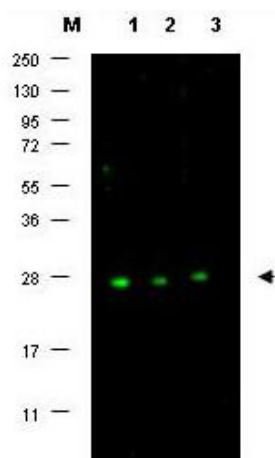
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Western Blot

Western Blot of Rabbit anti-p27 antibody. Lane 1: HEK293 pcDNA3. Lane 2: HEK293 pcDNA3 Rb2wt. Lane 3: HEK293 pcDNA3 Rb2S941A. Lane 4: HEK293 pcDNA3 Rb2 PM19. Load: 30 µg per lane. Primary antibody: p27 antibody diluted in 1%BSA at 1:2000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO (p/n B501-0500) overnight at 4°C. Predicted/Observed size: 27 kDa for p27.



### Western Blot

Western blot using Rockland's affinity purified anti-p27 antibody shows detection (lanes 1-3) of p27 protein in MCF7 whole cell lysate (p/n W09-000-360) (arrowhead). Separation was achieved using a 4-20% gradient gel. Blocking occurred using 5% BLOTTO (p/n B501-0500). Primary antibody was diluted 1:500 in 1% BLOTTO. The membrane was washed and reacted with a 1:10,000 dilution of Dylight™ 800 conjugated Gt-a-Rabbit IgG (p/n 611-145-002). Molecular weight estimation was made by comparison to prestained MW markers p/n MB-210-0500) indicated at the left (lane M). 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.