

Datasheet for 100-401-170**p16 Antibody****Overview**

Description:	Anti-p16 (RABBIT) Antibody - 100-401-170
Item No.:	100-401-170
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	The gene for CDKN2A generates several transcripts/proteins which differ from each other in their first exons. Three of these transcripts are generated by alternative splicing (isoform 1 a.k.a p16INK4A, isoform 2 and isoform 3 a.k.a p12), two of which are known to function as inhibitors of CDK4 kinase. One other transcript that is generated from this gene contains an alternate reading frame (ARF), with the first exon located 20kb upstream of the remainder of the gene (isoform 4 a.k.a. p14ARF, p19ARF, ARF). In spite of the structural and some functional differences, all the proteins encoded by the CDKN2A gene are involved in cell cycle G1 control.
Synonyms:	rabbit anti-p16 Antibody, Cyclin-dependent kinase inhibitor 2A isoforms 1/2/, Cyclin-dependent kinase 4 inhibitor A, CDK4I, p16-INK4a, p16INK4A, p16-INK4, Multiple tumor suppressor 1, MTS-1, CDKN2, MTS1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	CDKN2A
Reactivity:	Human
Immunogen Type:	Native Protein
Immunogen:	human p16 protein (missing the first 7 amino acids)

Purity/Specificity: This product was prepared from monospecific antiserum by delipidation and defibrination. Antiserum will specifically react with a p16 protein from human tissue. Cross reactivity may occur with p15 when immunoprecipitating in vitro translated product but not in immunoblots. Potentially cross reacts with p15.5.

Relevant Links:

- [NCBI - AAH15960.3](#)
- [UniProtKB - P42771](#)
- [GenelD - 1029](#)

Application Details

Tested Applications: IHC, WB

Application Note: This product was tested by immunoblot and found to be reactive against p16 from cell lysates and E.coli produced fusion proteins at a dilution of 1:1000 followed by reaction with Peroxidase conjugated Affinity Purified anti-Rabbit IgG [H&L] (Goat) (code #611-1302). Anti-p16 is suitable for the detection by immunoblot of human p16. This antisera is also suitable for immunoprecipitation of in vitro translated protein and cell lysates (Saos-2, 3T3-L1 weakly) and will co-precipitate associated proteins including p15 and potentially p15.5. This product was tested in IHC.

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

ELISA: 1:5,000 - 1:20,000

IHC: 1:500

IP: 1:100

WB: 1:500 - 1:5,000

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 85 mg/mL by Refractometry

Buffer: None

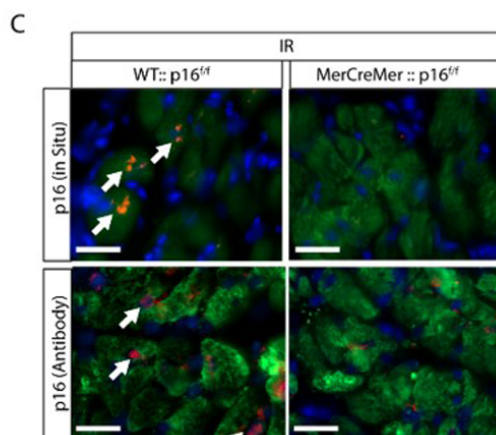
Preservative: 0.01% (w/v) Sodium Azide

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.

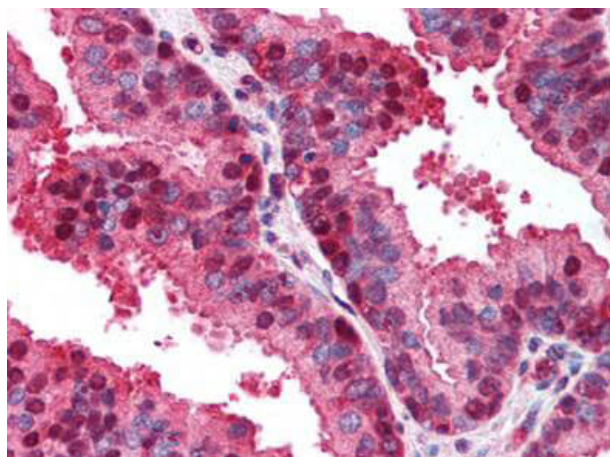
Images



Immunofluorescence Microscopy

Assay of p16 antibody specificity.

C) Representative images of p16 expression as assessed by in situ hybridization or using the Rockland antibody (p/n 100-401-170) at 5 weeks post-IR. Arrows indicate p16+ CMs identified by trop-c expression (p16 red and trop-c green). Scale bars 20µm. Supplementary Figure 3. PMID: 32996233



Immunohistochemistry

Rockland's anti-p16 antibody was diluted 1:500 to detect p16 in human prostate tissue. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counter stain.

References

- Dookun E et al. Clearance of senescent cells during cardiac ischemia–reperfusion injury improves recovery. *Aging Cell*. (2020)
- Cui J. et al. Skullcapflavone I has a potent anti-pancreatic cancer activity by targeting miR-23a. *Biofactors* (2020)

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.