

# IHCeasy<sup>®</sup> CDKN1A/P21 Ready-To-Use IHC Kit

Catalog Number: **KHC2255**

## General Information

Sample type:  
FFPE tissue  
Cited sample type:  
Reactivity:  
Human, Rat  
Cited Reactivity:

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Rabbit Polyclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Rabbit

## Kit Component

| Component                | Size               | Concentration |
|--------------------------|--------------------|---------------|
| Antigen Retrieval Buffer | 100 mL             | 50×           |
| Washing Buffer           | 100 mL ×2          | 20×           |
| Blocking Buffer          | 5 mL               | RTU           |
| Primary Antibody         | 5 mL               | RTU           |
| Secondary Antibody       | 5 mL               | RTU           |
| Chromogen Component A    | 0.2 mL             | RTU           |
| Chromogen Component B    | 4 mL               | RTU           |
| Signal Enhancer          | 5 mL               | RTU           |
| Counter Staining Reagent | 5 mL               | RTU           |
| Mounting Media           | 5 mL               | RTU           |
| Control Slide            | 1 slide (Optional) | FFPE          |
| Datasheet                | 1 Copy             |               |
| Manual                   | 1 Copy             |               |

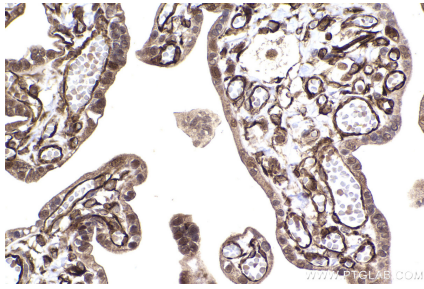
## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

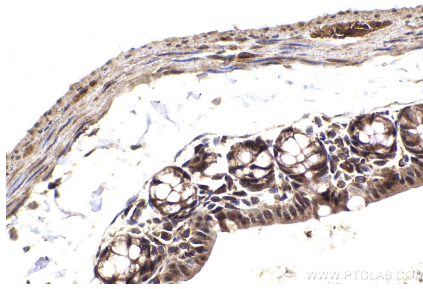
## Background

CDKN1A (p21, CIP1, WAF1) is a cyclin-dependent kinase inhibitor. CDKN1A binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at the G1 phase. The expression of CDKN1A is induced by wild-type but not mutant p53 protein, through which CDKN1A mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. CDKN1A can interact with proliferating cell nuclear antigen (PCNA), and plays a regulatory role in S phase DNA replication and DNA damage repair. CDKN1A was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation.

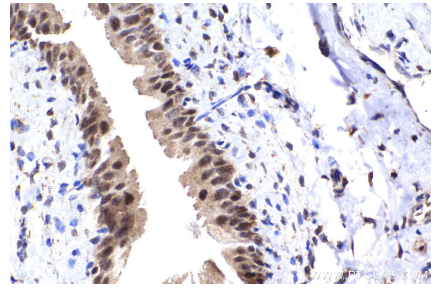
## Selected Validation Data



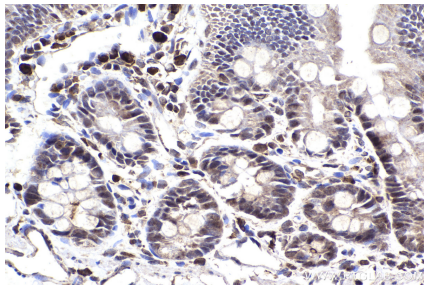
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using KHC2255 (CDKN1A/P21 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using KHC2255 (CDKN1A/P21 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat bladder tissue slide using KHC2255 (CDKN1A/P21 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat small intestine tissue slide using KHC2255 (CDKN1A/P21 IHC Kit).