

# IHCeasy<sup>®</sup> PRKAR1A Ready-To-Use IHC Kit

Catalog Number: **KHC2175**

## General Information

Sample type:  
FFPE tissue  
Cited sample type:  
Reactivity:  
Human, Mouse, 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.

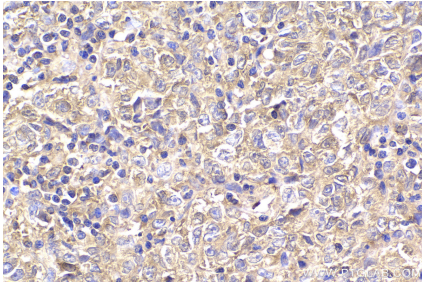
## Background

PKA is a heterotetramer inactive kinase composed of two regulatory and two catalytic subunits. The regulatory subunits are encoded by four genes (PRKAR1A, PRKAR2A, PRKAR1B, and PRKAR2B). PRKAR1A, a gene coding for the cAMP-dependent protein kinase (PKA) 1 $\alpha$  regulatory subunit, is located on human chromosome 17q22-24. PRKAR1A protein insufficiency and PKA dysregulation have been implicated in various types of disorders, including Albright hereditary osteodystrophy (AHO), pseudohypoparathyroidism (PHP), acrodysostosis (ACRDYS), and Carney complex. PRKAR1A protein expression level was significantly dysregulated in multiple primary carcinomas and distant metastases, such as cardiac myxomas, odontogenic myxomas, anaplastic thyroid carcinomas, breast cancer, pediatric pituitary adenomas, and Schwann cell tumors.

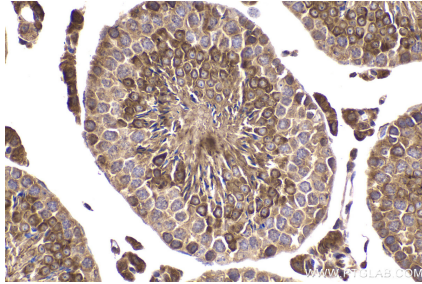
## Synonyms

CAR, CNC, CNC1, PKR1, PPNAD1, PRKAR1, PRKAR1A, Tissue specific extinguisher 1, TSE1

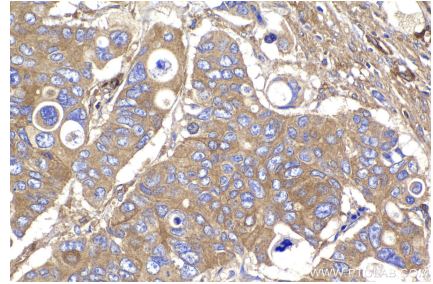
## Selected Validation Data



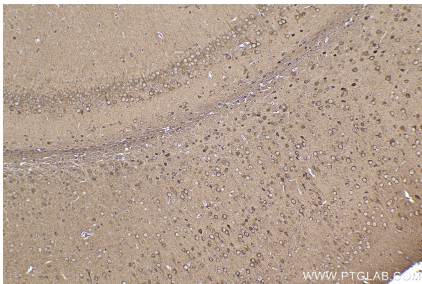
Immunohistochemical analysis of paraffin-embedded human malignant melanoma tissue slide using KHC2175 (PRKAR1A IHC Kit).



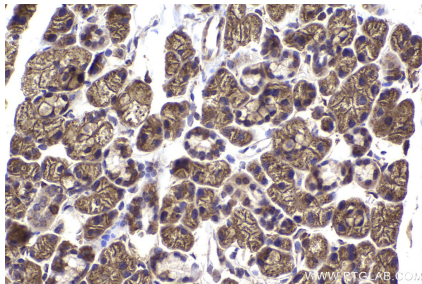
Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using KHC2175 (PRKAR1A IHC Kit).



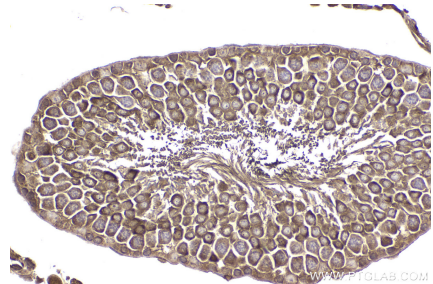
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using KHC2175 (PRKAR1A IHC Kit).



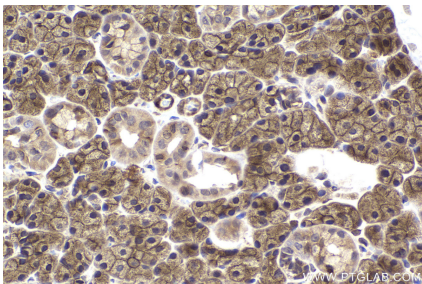
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using KHC2175 (PRKAR1A IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse salivary gland tissue slide using KHC2175 (PRKAR1A IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat testis tissue slide using KHC2175 (PRKAR1A IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat salivary gland tissue slide using KHC2175 (PRKAR1A IHC Kit).