

# IHC*easy* SMC1A Ready-To-Use IHC Kit

Catalog Number: **KHC2465**

## General Information

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

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Mouse Monoclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Mouse

## 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

Structural maintenance of chromosomes protein 1A (SMC1A) is involved in chromosome cohesion during cell cycle and in DNA repair. It is a central component of cohesin complex which is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.

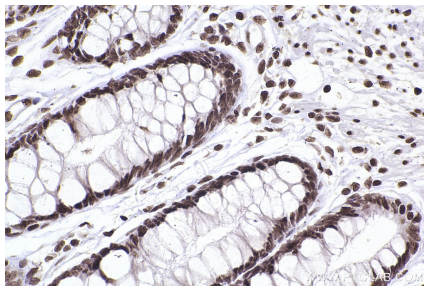
## Synonyms

SMC1A,CDLS2,DXS423E,KIAA0178,Sb1.8

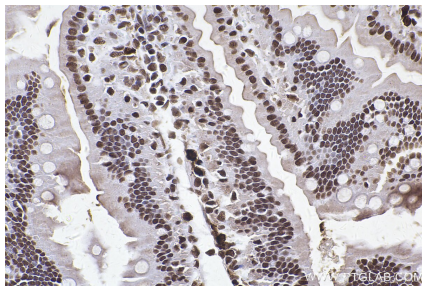
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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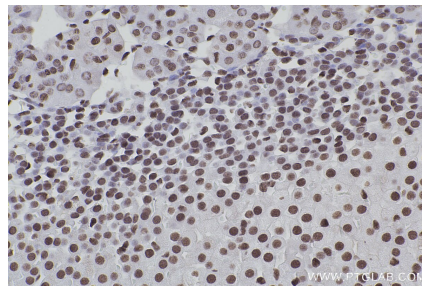
## Selected Validation Data



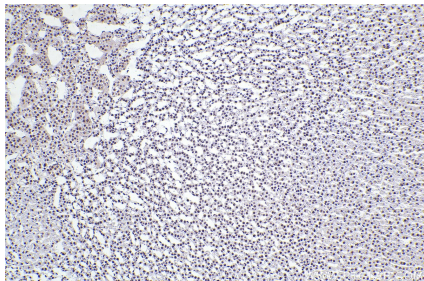
Immunohistochemical analysis of paraffin-embedded human rectal cancer tissue slide using KHC2465 (SMC1A IHC Kit).



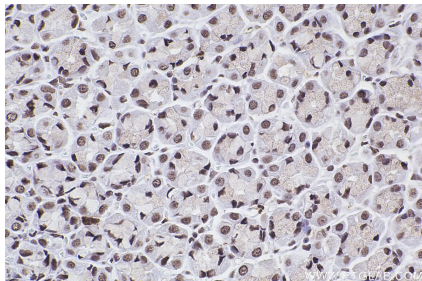
Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using KHC2465 (SMC1A IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse adrenal gland tissue slide using KHC2465 (SMC1A IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat adrenal gland tissue slide using KHC2465 (SMC1A IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat stomach tissue slide using KHC2465 (SMC1A IHC Kit).