

# IHC*easy* SUMO1 Ready-To-Use IHC Kit

Catalog Number: **KHC1649**

## 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.

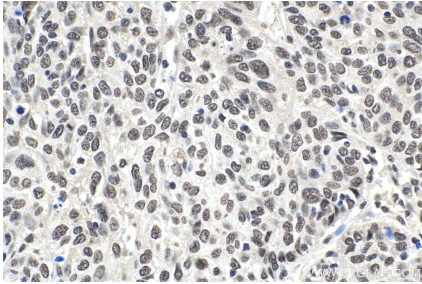
## Background

Ubiquitin is most famous for its function in targeting proteins for degradation by the 26S proteasome, ubiquitin needs to be attached to a substrate in chains (polyubiquitylation) before being recognized by proteasome. Similarly, SUMO (small ubiquitin-related modifier) can be linked to substrates in chains (polysumoylation), SUMO modification has been implicated in many important cellular processes including the control of genome stability, signal transduction, targeting to and formation of nuclear compartments, cell cycle and meiosis. There are 4 confirmed SUMO isoforms in human, SUMO-1, SUMO-2, SUMO-3 and SUMO-4. SUMO-2 and SUMO-3 are nearly identical but are distinct from SUMO-1. SUMO2/3 conjugation was recently widely involved in neuroprotective activities. A substitution (M55V) of SUMO4 was strongly associated with the pathogenesis of type 1 diabetes (T1D) involving NF kappa B related mechanisms.

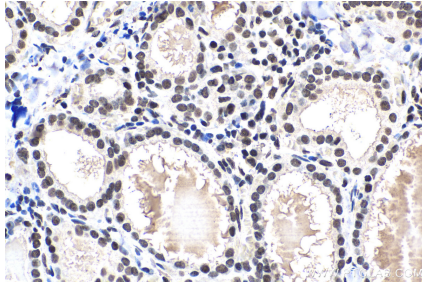
## Synonyms

DAP 1, GAP modifying protein 1, GMP1, OFC10, PIC1, Sentrin, SMT3, SMT3 homolog 3, SMT3C, SMT3H3, SUMO 1, SUMO1, Ubiquitin like protein SMT3C, Ubiquitin like protein UBL1, UBL1

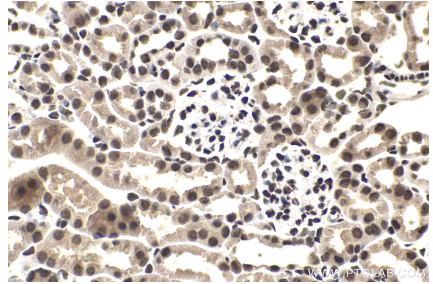
## Selected Validation Data



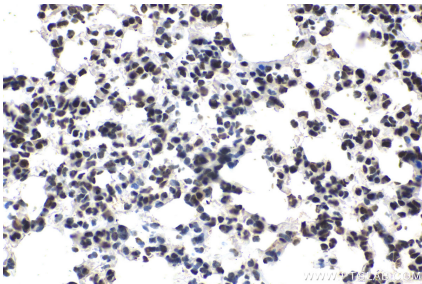
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using KHC1649 (SUMO1 IHC Kit).



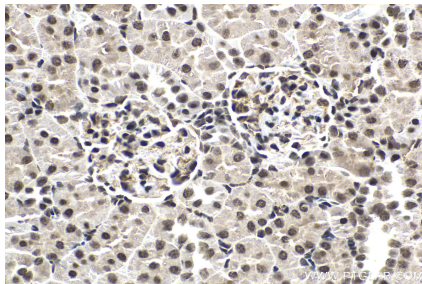
Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using KHC1649 (SUMO1 IHC Kit).



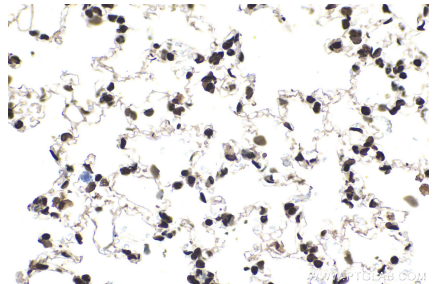
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using KHC1649 (SUMO1 IHC Kit).



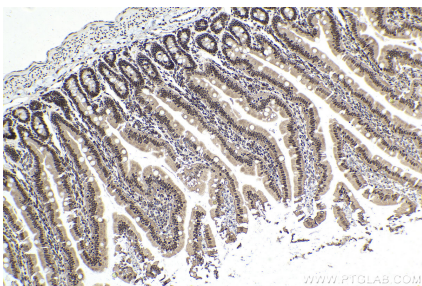
Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using KHC1649 (SUMO1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using KHC1649 (SUMO1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat lung tissue slide using KHC1649 (SUMO1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat small intestine tissue slide using KHC1649 (SUMO1 IHC Kit).