



# IHCeasy® PHF1 Ready-To-Use IHC Kit

Catalog Number: KHC1450

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.

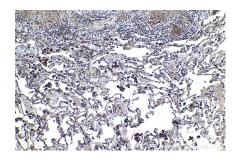
## Background

PHF1, also named as PHD finger protein 1, is a 567 amino acid protein, which contains 2 PHD-type zinc fingers and 1 Tudor domain and belongs to the Polycomblike family. Polycomb group (PcG) that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex. PHF1 Involve in DNA damage response and is recruited at double-strand breaks (DSBs). PHF1 acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting the PRC2 complex: it is however unclear whether recruitment of the PRC2 complex to H3K36me3 leads to enhance or inhibit H3K27me3 methylation mediated by the PRC2 complex. According to some reports, PRC2 recruitment by PHF1 promotes H3K27me3 and subsequent gene silencing by inducing spreading of PRC2 and H3K27me3 into H3K36me3. According to another report, PHF1 recruits the PRC2 complex at double-strand breaks (DSBs) and inhibits the activity of PRC2. PHF1 regulates p53/TP53 stability and prolonges its turnover: PHF1 may act by specifically binding to a methylated from of p53/TP53.

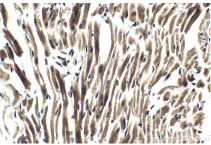
#### **Synonyms**

 $hPCl1, MTF2L2, PCL1, PHD\ finger\ protein\ 1, PHF1, PHF2, Polycomb\ like\ protein\ 1, Protein\ PHF1$ 

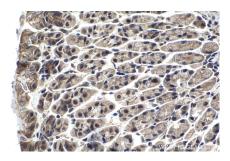
## Selected Validation Data



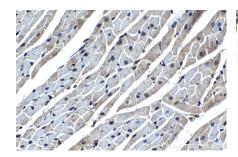
Immunohistochemical analysis of paraffinembedded human lung tissue slide using KHC1450 (PHF1 IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using KHC1450 (PHF1 IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse stomach tissue slide using KHC1450 (PHF1 IHC Kit).



Immunohistochemical analysis of paraffinembedded rat heart tissue slide using KHC1450 (PHF1 IHC Kit).



Immunohistochemical analysis of paraffinembedded rat stomach tissue slide using KHC1450 (PHF1 IHC Kit).