

# IHCeasy<sup>®</sup> PHD2/EGLN1 Ready-To-Use IHC Kit

Catalog Number: **KHC1225**

## 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.

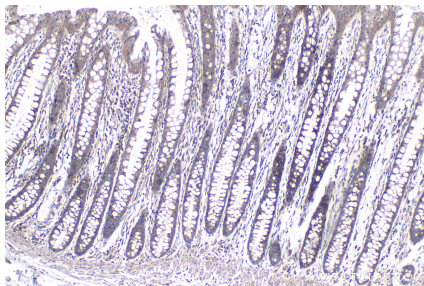
## Background

EGLN1, also named as PHD2, SM-20, HPH-2 and HIF-PH2, catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. It hydroxylates HIF-1 alpha at 'Pro-402' and 'Pro-564', and HIF-2 alpha. EGLN1 functions as a cellular oxygen sensor and, under normoxic conditions, targets HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Defects in EGLN1 are the cause of erythrocytosis familial type 3 (ECYT3). It mainly localizes in cytoplasm and can shuttle between the nucleus and cytoplasm.

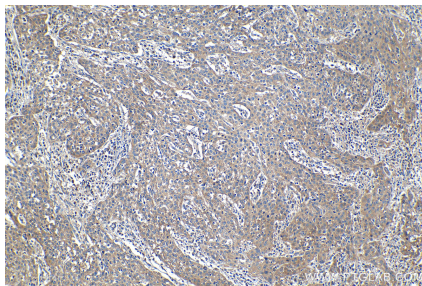
## Synonyms

C1orf12, ECYT3, Egl nine homolog 1, EGLN1, HIF PH2, HIF prolyl hydroxylase 2, HIFPH2, HPH 2, HPH2, PHD2, PHD2/EGLN1, PNAS 137, SM 20, SM20, ZMYND6

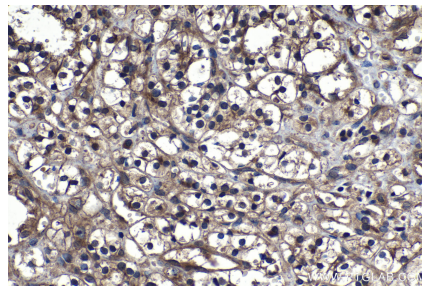
## Selected Validation Data



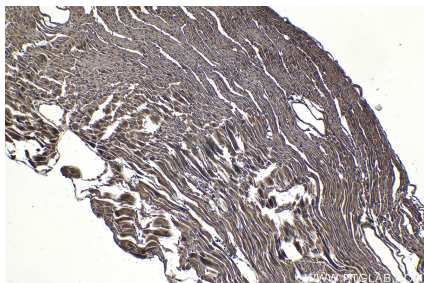
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using KHC1225 (PHD2/EGLN1 IHC Kit).



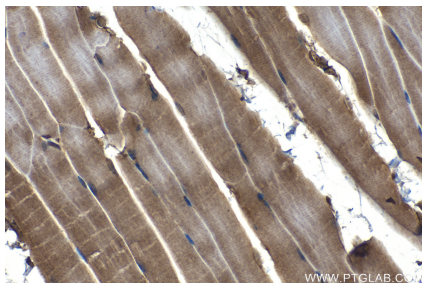
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using KHC1225 (PHD2/EGLN1 IHC Kit).



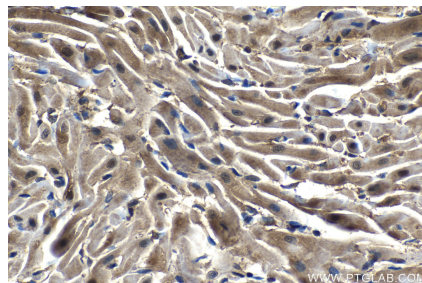
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using KHC1225 (PHD2/EGLN1 IHC Kit).



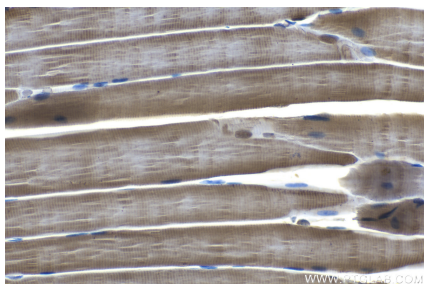
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using KHC1225 (PHD2/EGLN1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using KHC1225 (PHD2/EGLN1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using KHC1225 (PHD2/EGLN1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat skeletal muscle tissue slide using KHC1225 (PHD2/EGLN1 IHC Kit).