

For Research Use Only

# P4HA1 Polyclonal antibody

Catalog Number: 12658-1-AP

Featured Product

25 Publications



## Basic Information

### Catalog Number:

12658-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3292

### GenBank Accession Number:

BC034998

### GeneID (NCBI):

5033

### UNIPROT ID:

P13674

### Full Name:

prolyl 4-hydroxylase, alpha polypeptide I

### Calculated MW:

534 aa, 61 kDa

### Observed MW:

61 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

WB : A431 cells, NIH/3T3 cells, human heart tissue, rat skin tissue, HT-1080 cells, BGC-823 cells, PC-3 cells

IP : A431 cells,

IHC : human pancreas cancer tissue, human breast cancer tissue

IF/ICC : U2OS cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

P4HA1 (Prolyl 4-hydroxylase subunit alpha-1) is also known as P4HA and belongs to the P4HA family, which plays a central role in collagen synthesis. P4HA1 catalyzes the post-translational formation of 4-hydroxyproline in -Xaa-Pro-Gly- sequences in collagens and other proteins. The gene encodes a polypeptide of 517 amino acid residues and a signal peptide of 17 amino acids and the full length protein has two glycosylation sites (uniprot). It can exist as a heteromer, dimer or tetramer (refer to: GENATLAS). P4HA1 has some isoforms with the MW 61-63 kDa and 57-59 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yue Ning	34659558	J Cancer	WB,IHC
Xiaowei Xue	32436609	Cancer Med	WB
Mengkai Yang	33952718	Aging (Albany NY)	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

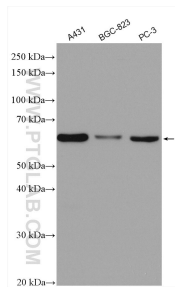
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

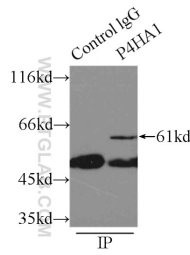
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

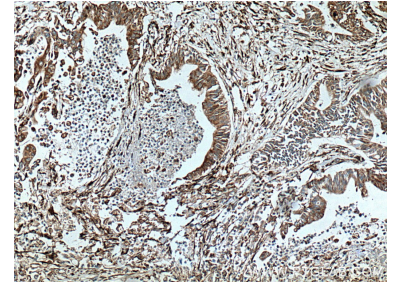
## Selected Validation Data



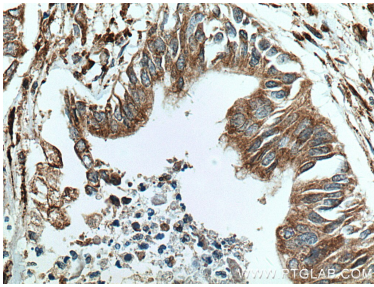
Various lysates were subjected to SDS PAGE followed by western blot with 12658-1-AP (P4HA1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



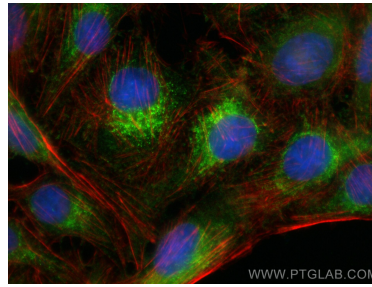
IP result of anti-P4HA1 (IP:12658-1-AP, 3ug; Detection:12658-1-AP 1:600) with A431 cells lysate 3300ug.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 12658-1-AP (P4HA1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 12658-1-AP (P4HA1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed U2OS cells using P4HA1 antibody (12658-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).