### For Research Use Only

# P4HA1 Polyclonal antibody

Catalog Number: 12658-1-AP

Featured Product

25 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 12658-1-AP BC034998

Concentration: GeneID (NCBI): 500 ug/ml 5033

Source: UNIPROT ID:

Rabbit P13674

Isotype: Full Name:
IgG prolyl 4-hydroxylase, alpha

Immunogen Catalog Number: polypeptide I

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen

AG3292 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,

# 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

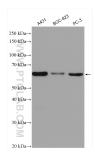
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

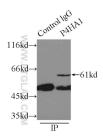
W: ptgcn.cor

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

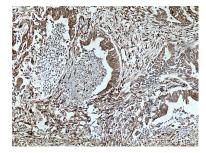
## **Selected Validation Data**



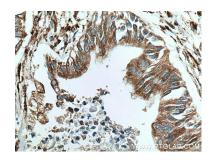
Various lysates were subjected to SDS PAGE followed by western blot with 12658-1-AP (P4HA1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



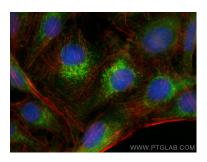
IP result of anti-P4HA1 (IP:12658-1-AP, 3ug; Detection:12658-1-AP 1:600) with A431 cells lysate 3300ug.



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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).