### For Research Use Only

# P4HA1 Polyclonal antibody

Catalog Number: 12658-1-AP

**Featured Product** 

21 Publications

BC034998

Observed MW:



**Basic Information** 

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

GeneID (NCBI):

150ul, Concentration: 500 µg/ml by 5033

Nanodrop; Full Name:

Source: prolyl 4-hydroxylase, alpha Rabbit polypeptide I

Calculated MW: Isotype: 534 aa, 61 kDa IgG

61 kDa AG3292

**Tested Applications:** IF, IHC, IP, WB, ELISA

Immunogen Catalog Number:

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat **Cited Species:** 

human, rat, mouse

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

buffer pH 6.0

**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 1:50-1:500

**Applications** 

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: A431 cells,

# **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

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

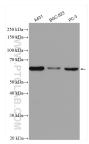
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

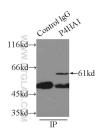
Aliquoting is unnecessary for -20°C storage

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

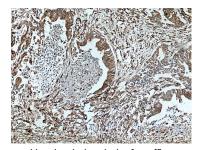
## **Selected Validation Data**



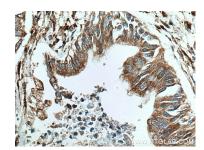
Various lysates were subjected to SDS PAGE followed by western blot with 12658-1-AP (P4HA1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



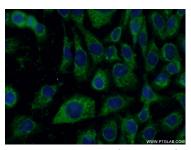
IP Result of anti-P4HA1 (IP:12658-1-AP, 3ug; Detection:12658-1-AP 1:600) with A431 cells lysate 3300ug.



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 A431 cells using 12658-1-AP (P4HA1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).