

# P4HA1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17086b

#### **Product Information**

Application WB, E Primary Accession P13674

Other Accession <u>Q1RMU3, NP 001136067.1, NP 000908.2, NP 001017962.1</u>

Reactivity Human Bovine **Predicted** Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB37006 61049 **Calculated MW** 414-442 **Antigen Region** 

#### **Additional Information**

Gene ID 5033

Other Names Prolyl 4-hydroxylase subunit alpha-1, 4-PH alpha-1, Procollagen-proline,

2-oxoglutarate-4-dioxygenase subunit alpha-1, P4HA1, P4HA

Target/Specificity This P4HA1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 414-442 amino acids from the

C-terminal region of human P4HA1.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** P4HA1 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name P4HA1

Synonyms P4HA

**Function** Catalyzes the post-translational formation of 4- hydroxyproline in

-Xaa-Pro-Gly- sequences in collagens and other proteins.

**Cellular Location** Endoplasmic reticulum lumen.

**Tissue Location** Expressed in the heart, liver, skeletal muscle, kidney, placenta, lung and

pancreas.

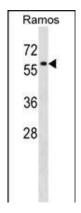
## **Background**

This gene encodes a component of prolyl 4-hydroxylase, a key enzyme in collagen synthesis composed of two identical alpha subunits and two beta subunits. The encoded protein is one of several different types of alpha subunits and provides the major part of the catalytic site of the active enzyme. In collagen and related proteins, prolyl 4-hydroxylase catalyzes the formation of 4-hydroxyproline that is essential to the proper three-dimensional folding of newly synthesized procollagen chains. Alternatively spliced transcript variants encoding different isoforms have been described.

#### References

Rose, J. Phd, et al. Mol. Med. (2010) In press: Gorres, K.L., et al. PLoS ONE 4 (11), E7635 (2009): Koivunen, P., et al. J. Biol. Chem. 281(39):28712-28720(2006) Fahling, M., et al. J. Biol. Chem. 281(36):26089-26101(2006) Grimmer, C., et al. Am. J. Pathol. 169(2):491-502(2006)

### **Images**



P4HA1 Antibody (C-term) (Cat. #AP17086b) western blot analysis in Ramos cell line lysates (35ug/lane). This demonstrates the P4HA1 antibody detected the P4HA1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.