

# P4HA3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13685c

#### **Product Information**

**Application** WB, E **Primary Accession Q7Z4N8** Other Accession NP 878907.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB33578 **Calculated MW** 61126 274-303 **Antigen Region** 

## **Additional Information**

**Gene ID** 283208

Other Names Prolyl 4-hydroxylase subunit alpha-3, 4-PH alpha-3, Procollagen-proline,

2-oxoglutarate-4-dioxygenase subunit alpha-3, P4HA3

**Target/Specificity**This P4HA3 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 274-303 amino acids from the Central

region of human P4HA3.

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

**Format** Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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** P4HA3 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name P4HA3

**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** Highly expressed in placenta, liver and fetal skin. Weakly expressed in fetal

epiphyseal cartilage, fetal liver, fibroblast, lung and skeletal muscle. Expressed

also in fibrous cap of carotid atherosclerotic lesions.

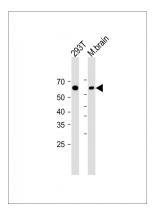
## **Background**

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 have been observed, but their full-length nature has not been determined.

## References

Rose, J. Phd, et al. Mol. Med. (2010) In press: Koivunen, P., et al. J. Biol. Chem. 281(39):28712-28720(2006) Kukkola, L., et al. J. Biol. Chem. 278(48):47685-47693(2003) Van Den Diepstraten, C., et al. Circulation 108(5):508-511(2003)

# **Images**



All lanes: Anti-P4HA3 Antibody (Center) at 1:2000 dilution Lane 1: 293T whole cell lysate Lane 2: Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 61 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

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