### For Research Use Only

# PLOD1 Polyclonal antibody

Catalog Number:29480-1-AP 1 Publications



**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** 

29480-1-AP

GeneID (NCBI):

BC016657

Antigen affinity purification

Size: 700 μg/ml

5351

Recommended Dilutions:

Source:

**UNIPROT ID:** Q02809

WB 1:1000-1:6000 IHC 1:50-1:500

IF/ICC 1:50-1:500

Rabbit Isotype:

Full Name:

procollagen-lysine 1, 2-oxoglutarate

Immunogen Catalog Number:

5-dioxygenase 1

AG31626

Calculated MW: 727 aa, 84 kDa

Observed MW: 84-88 kDa

Applications

**Tested Applications:** 

IF/ICC, IHC, WB, ELISA

WB: A375 cells, K-562 cells, HeLa cells, U-251 cells, U2OS cells

Positive Controls:

Cited Applications: IHC

Species Specificity:

IHC: human skin cancer tissue.

Human **Cited Species:** 

IF/ICC: K-562 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**

PLOD1, as known as procollagen - lysine, 2 - oxoglutarate 5 - dioxygenase 1, is a member of the PLOD family(Uniprot, Genel D:5351). PLOD1 participates in catalyzing hydroxylysine residue, which is critical for the formation of covalent cross-link (PMID:30003082). PLOD1 plays an important role in the development and progression of tumors. Aberrantly expressed PLOD1 promotes cancer aggressiveness in glioma and bladder cancer, providing a potential prognostic biomarker and therapeutic target (PMID:31199049, PMID:34040895). PLOD1 has 2 isoforms produced by alternative splicing.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Dan-Dan Wang	39068670	Aging (Albany NY)	IHC

Storage

Storage:

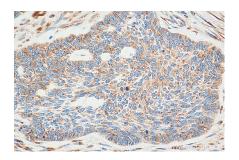
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

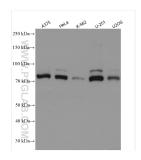
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

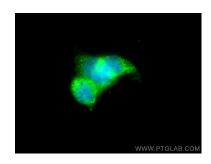
## Selected Validation Data



Immunohistochemical analysis of paraffinembedded human skin cancer tissue slide using 29480-1-AP (PLOD1 antibody) at dilution of 1:200 (under 40x lens).



Various lysates were subjected to SDS PAGE followed by western blot with 29480-1-AP (PLOD1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed K-562 cells using PLOD1 antibody (29480-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).