

For Research Use Only

# PLOD2 Polyclonal antibody

Catalog Number: 21214-1-AP

Featured Product

53 Publications



## Basic Information

### Catalog Number:

21214-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG15614

### GenBank Accession Number:

BC037169

### GeneID (NCBI):

5352

### UNIPROT ID:

O00469

### Full Name:

procollagen-lysine, 2-oxoglutarate 5-dioxygenase 2

### Calculated MW:

758 aa, 85 kDa

### Observed MW:

87 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:3000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rabbit, zebrafish

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: Caco-2 cells, A431 cells, DU 145 cells, HT-1080 cells, THLE-2 cells, HEK-293 cells, HeLa cells, HepG2 cells

**IP**: mouse testis tissue,

**IHC**: human liver cancer tissue, human pancreas tissue, human skeletal muscle tissue

**IF/ICC**: HeLa cells,

**FC (Intra)**: HeLa cells,

## Background Information

PLOD2, also named as LH2, forms hydroxylysine residues in -Xaa-Lys-Gly- sequences in collagens. It is a potential novel prognostic factor for HCC patients following surgery. Among the PLOD genes, PLOD2 contributes to cancer prognosis and angiogenesis. Several authors have reported that PLOD2 expression might provide prognostic information about malignant tumours such as glioblastoma. PLOD2 expression is a useful biomarker for the effects of antiangiogenic treatment for malignancy. (PMID:22098155). It has 2 isoforms produced by alternative splicing and seven glycosylation sites. This antibody is specific to PLOD2.

## Notable Publications

Author	Pubmed ID	Journal	Application
Tomoaki Saito	34718219	Bone	WB, IHC
Ryunosuke Nozaki	34875533	Biochem Biophys Res Commun	WB
Bernd Stratmann	27898103	Sci Rep	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

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

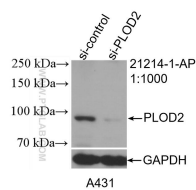
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

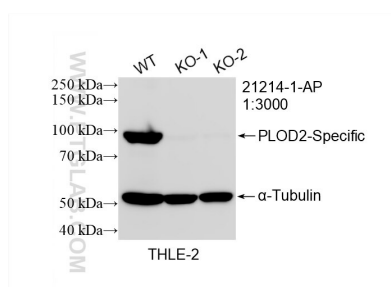
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

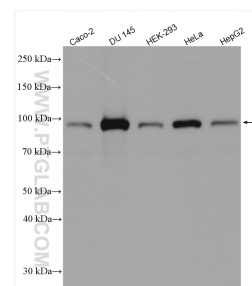
## Selected Validation Data



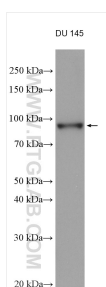
WB result of PLOD2 antibody (21214-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PLOD2-Specific transfected A431 cells.



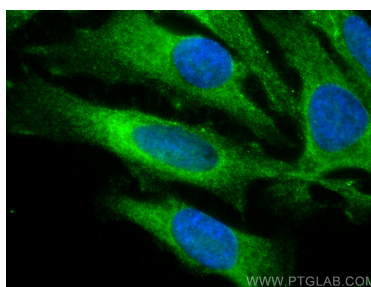
WB result of PLOD2 antibody (21214-1-AP 1:3000; room temperature for 1.5 hours) with wild-type and PLOD2 knockout THLE-2 cells.



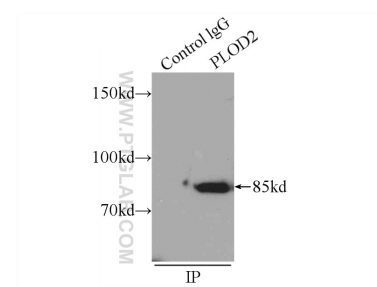
Various lysates were subjected to SDS PAGE followed by western blot with 21214-1-AP (PLOD2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



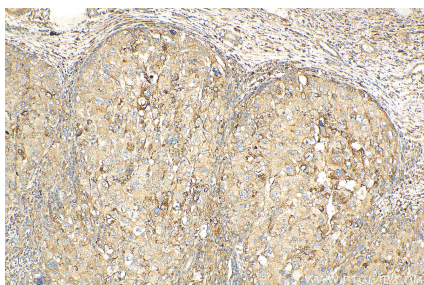
DU 145 cells lysates were subjected to SDS PAGE followed by western blot with 21214-1-AP (PLOD2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



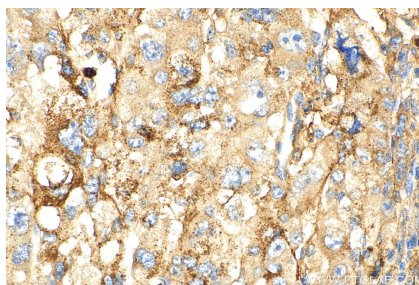
Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using PLOD2 antibody (21214-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



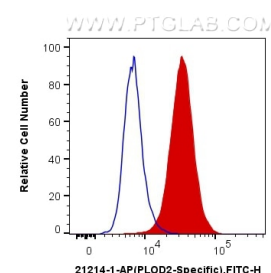
IP result of anti-PLOD2 (IP:21214-1-AP, 4ug; Detection:21214-1-AP 1:500) with mouse testis tissue lysate 5000ug.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 21214-1-AP (PLOD2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 21214-1-AP (PLOD2-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human PLOD2 (21214-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug x. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).