

For Research Use Only

# CDO1 Polyclonal antibody

Catalog Number: 12589-1-AP

Featured Product

20 Publications



## Basic Information

### Catalog Number:

12589-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3294

### GenBank Accession Number:

BC024241

### GeneID (NCBI):

1036

### UNIPROT ID:

Q16878

### Full Name:

cysteine dioxygenase, type I

### Calculated MW:

200 aa, 23 kDa

### Observed MW:

23 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:6000

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

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse, rat, pig

### Cited Species:

human, mouse, rat

### Positive Controls:

WB : mouse liver tissue, rat liver tissue

IP : mouse liver tissue,

IHC : human liver cancer tissue, human placenta tissue, human pancreas cancer tissue

IF/ICC : HepG2 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

CDO1(cysteine dioxygenase type 1) is also named as CDO and belongs to the cysteine dioxygenase family. It is an enzyme that adds molecular oxygen to the sulfur of cysteine, converting the thiol to a sulfinic acid known as cysteinesulfinic acid (3-sulfinolalanine) and CDO1 is one of the most highly regulated metabolic enzymes responding to diet(PMID:19011731). The expression of CDO can significantly decrease the level of intracellular cysteine and this reduction is also associated with a decrease in total glutathione levels(PMID:17327371). Cysteine dioxygenase (CDO) plays a critical role in the regulation of cellular cysteine concentration and multiple forms of CDO (23 kDa, 25 kDa, and 68 kDa) have been claimed based upon separation and detection using SDS-PAGE/western blotting(PMID: 14752623).

## Notable Publications

Author	Pubmed ID	Journal	Application
Lin Shen	36150660	Biochim Biophys Acta Mol Basis Dis	WB
Ying-Ying Guo	36253617	Nat Metab	WB
Keita Kojima	29746493	PLoS One	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

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

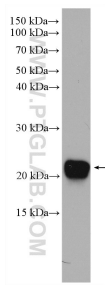
For technical support and original validation data for this product please contact:

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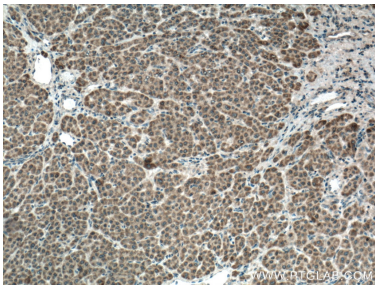
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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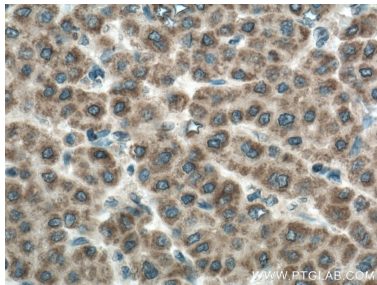
Selected Validation Data



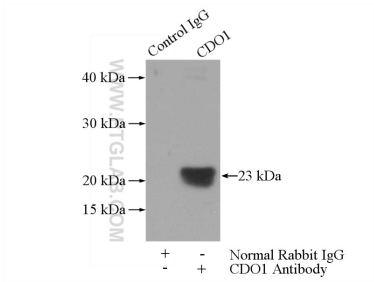
mouse liver tissue were subjected to SDS PAGE followed by western blot with 12589-1-AP (CDO1 antibody) at dilution of 1:3000 incubated at 4 degree celsius over night.



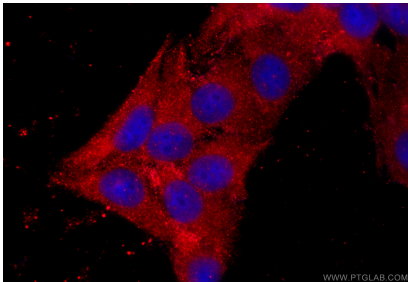
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12589-1-AP (CDO1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12589-1-AP (CDO1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CDO1 (IP:12589-1-AP, 3ug; Detection:12589-1-AP 1:600) with mouse liver tissue lysate 4000ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CDO1 antibody (12589-1-AP) at dilution of 1:400 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).