

For Research Use Only

CDO1 Polyclonal antibody

Catalog Number: 12589-1-AP **17 Publications**



Basic Information

Catalog Number: 12589-1-AP	GenBank Accession Number: BC024241	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 600 µg/ml by Nanodrop and 267 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 1036	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
Source: Rabbit	UNIPROT ID: Q16878	
Isotype: IgG	Full Name: cysteine dioxygenase, type I	
Immunogen Catalog Number: AG3294	Calculated MW: 200 aa, 23 kDa	
	Observed MW: 23 kDa	

Applications

Tested Applications: IHC, IP, WB, ELISA	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
Cited Applications: WB, IHC	
Species Specificity: human, mouse, rat, pig	
Cited Species: human, rat, mouse	

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-sulfinoalanine) 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

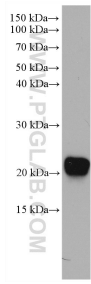
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

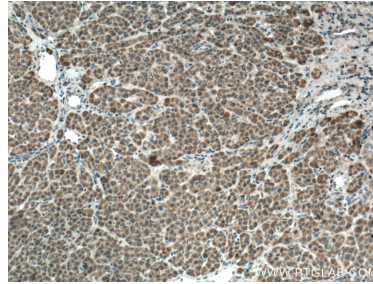
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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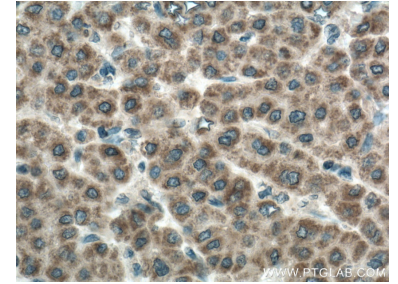
Selected Validation Data



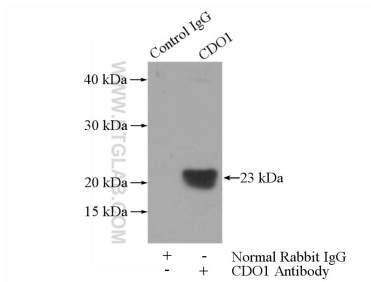
mouse liver tissue were subjected to SDS PAGE followed by western blot with 12589-1-AP (CDO1 antibody) at dilution of 1:3000 incubated at 4 degree celsius over night.



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.