

**CDO1 rabbit pAb****Cat#: orb773823 (Manual)**

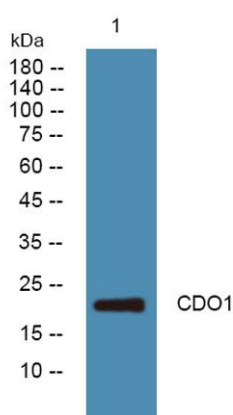
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<b>Product Name</b>	CDO1 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	CDO1 Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Cysteine dioxygenase type 1 (EC 1.13.11.20) (Cysteine dioxygenase type I) (CDO) (CDO-I)
<b>Gene Name</b>	CDO1
<b>Cellular localization</b>	cytosol,
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	27kD
<b>Human Gene ID</b>	1036
<b>Human Swiss-Prot Number</b>	Q16878
<b>Alternative Names</b>	

## Background

catalytic activity:L-cysteine + O(2) = 3-sulfinoalanine.,cofactor: Binds 1 iron ion per subunit. Zinc to a much lesser extent.,cofactor: IRON; NAD(P)H.,function: Initiates several important metabolic pathways related to pyruvate and several sulfate compounds including sulfate, hypotaurine and taurine. Critical regulator of cellular cysteine concentrations. Has an important role in maintaining the hepatic concentration of intracellular free cysteine within a proper narrow range.,induction: In hepatoblastoma HepG2 cells, down-regulated by phorbol 12-myristate 13-acetate.,pathway: Organosulfur biosynthesis; taurine biosynthesis; hypotaurine from L-cysteine: step 1/2.,PTM: The thioether cross-link between Cys-93 and Tyr-157 plays a structural role through stabilizing the Fe(2+) ion, and prevents the production of highly damaging free hydroxyl radicals by holding the oxygen radical via hydroxyl hydrogen.,similarity: Belongs to the cysteine dioxygenase family.,subunit: Monomer.,tissue specificity: Highly expressed in liver and placenta. Low expression in heart, brain and pancreas. Also detected in hepatoblastoma HepG2 cells.,



**Western blot analysis of lysates from DU145 cells, primary antibody was diluted at 1:1000, 4° over night**