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CDO1 Antibody
Catalog # ASC11907

Specification

CDO1 Antibody - Product Information

Application	**WB**
Primary Accession	Q16878
Other Accession	NP_001792, 56786147
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 22 kDa** **Observed: 24 kDa KDa**
Application Notes	**CDO1 antibody can be used for detection of CDO1 by Western blot at 1 - 2 µg/ml.**

CDO1 Antibody - Additional Information

Gene ID **1036**

Target/Specificity
CDO1; CDO1 antibody is human, mouse and rat reactive.

Reconstitution & Storage
CDO1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
CDO1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CDO1 Antibody - Protein Information

Name CDO1

Function
Catalyzes the oxidation of cysteine to cysteine sulfinic acid with addition of molecular dioxygen.

Tissue Location
Highly expressed in liver and placenta. Low expression in heart, brain and pancreas. Also detected in hepatoblastoma Hep-G2 cells.

CDO1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot

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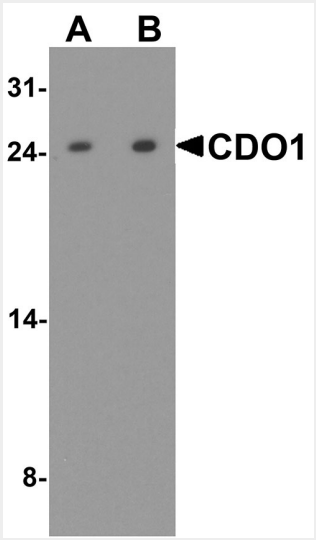
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CDO1 Antibody - Images



Western blot analysis of CDO1 in rat liver tissue lysate with CDO1 antibody at (A) 1 and (B) 2 µg/ml.

CDO1 Antibody - Background

CDO1 (cysteine dioxygenase, type I) belongs to the cysteine dioxygenase family and is involved in organosulfur biosynthesis (1). CDO1 functions as a dioxygenase that uses iron and zinc as cofactors to catalyze the conversion of L-cysteine and oxygen to 3-sulfinoalanine (1,2). CDO1 exists as a monomer and is expressed at high levels in liver and placenta and at lower levels in brain, pancreas and heart (1). CDO1 is involved in pyruvate-, sulfate- and taurine-related metabolic pathways and is a crucial regulator of cysteine concentrations within the cell (3,4).

CDO1 Antibody - References

McCann KP, Akbari MT, Williams AC, et al. Human cysteine dioxygenase type I: primary structure derived from base sequencing of cDNA. Biochim. Biophys. Acta 1994; 1209:107-10.
Ye S, Wu X, Wei L, et al. An insight into the mechanism of human cysteine dioxygenase. Key roles of the thioether-bonded tyrosine-cysteine cofactor. J. Biol. Chem. 2007; 282:3391-402.
Booken N, Gratchev A, Utikal J, et al. Sezary syndrome is a unique cutaneous T-cell lymphoma as identified by an expanded gene signature including diagnostic marker molecules CDO1 and DNM3. Leukemia 2008; 22:393-9.
Wrangle J, Machida EO, Danilova L, et al. Functional identification of cancer-specific methylation of CDO1, HOXA9, and TAC1 for the diagnosis of lung cancer. Clin. Cancer Res. 2014; 20:1856-64.