

**DDO Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP4795c****Specification**

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**DDO Antibody (Center) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q99489</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	102-130

**DDO Antibody (Center) - Additional Information****Gene ID** 8528**Other Names**

D-aspartate oxidase, DASOX, DDO, DDO

**Target/Specificity**

This DDO antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 102-130 amino acids from the Central region of human DDO.

**Dilution**

WB~~1:1000

IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

DDO Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**DDO Antibody (Center) - Protein Information****Name** DDO

**Function** Selectively catalyzes the oxidative deamination of acidic amino acids (PubMed:[9163533](#), PubMed:[1991137](#), PubMed:[20603179](#), PubMed:[23391306](#), PubMed:[25747990](#), PubMed:[28560262](#), PubMed:[28393897](#), PubMed:[29292239](#), PubMed:[32553892](#), PubMed:[31914658](#),

PubMed:[28629864](#)). Suppresses the level of D-aspartate in the brain, an amino acid that can act as an agonist for glutamate receptors (PubMed:[28560262](#)). Protects the organism from the toxicity of D-amino acids (By similarity). May also function in the intestine (By similarity).

#### Cellular Location

Peroxisome matrix. Cytoplasm, cytosol. Note=Active in the peroxisomal matrix [Isoform 3]: Peroxisome matrix

#### Tissue Location

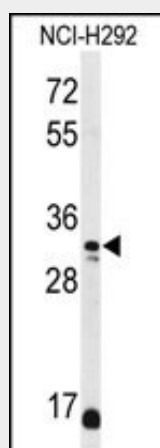
Expressed in epithelial cells of the proximal nephron tubules in the renal cortex (at protein level) (PubMed:1991137, PubMed:12209855). In the brain, expressed in the frontal, temporal, and occipital lobes of the cortex, hippocampus, striatum, diencephalon, brainstem, cerebellum, spinal cord, plexus choroiderous and ependyma (at protein level) (PubMed:12209855, PubMed:28560262). Expression is increased in the prefrontal cortex of schizophrenic patients (PubMed:25689573). Levels are normal in the superior frontal gyrus of patients with Alzheimer's disease (PubMed:30822420)

### DDO Antibody (Center) - Protocols

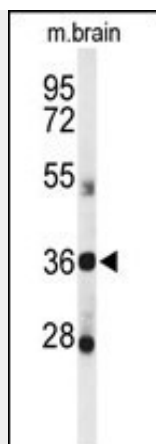
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

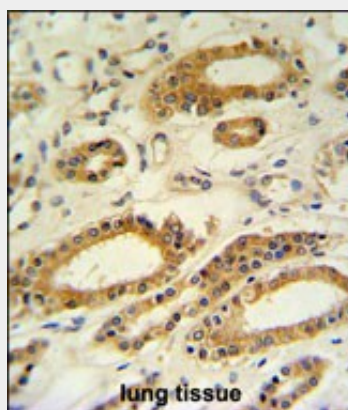
### DDO Antibody (Center) - Images



Western blot analysis of DDO Antibody (Center) (Cat. #AP4795c) in NCI-H292 cell line lysates (35ug/lane). DDO (arrow) was detected using the purified Pab.



Western blot analysis of DDO Antibody (Center) (Cat. #AP4795c) in mouse brain tissue lysates (35ug/lane). DDO (arrow) was detected using the purified Pab.



DDO Antibody (Center) (Cat. #AP4795c) IHC analysis in formalin fixed and paraffin embedded lung tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DDO Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

### **DDO Antibody (Center) - Background**

DDO is a peroxisomal flavoprotein that catalyzes the oxidative deamination of D-aspartate and N-methyl D-aspartate. Flavin adenine dinucleotide or 6-hydroxyflavin adenine dinucleotide can serve as the cofactor in this reaction.

### **DDO Antibody (Center) - References**

Jamra, R.A., et al. Psychiatr. Genet. 19 (1), 56 (2009)  
Mungall, A.J., et al. Nature 425(6960):805-811(2003)  
Zaar, K., et al. J. Comp. Neurol. 450(3):272-282(2002)