

DDO Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP4795c**Specification**

DDO Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q99489](#)**DDO Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 8528**Other Names**

D-aspartate oxidase, DASOX, DDO, DDO

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DDO Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

DDO Antibody (Center) Blocking Peptide - Images**DDO Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)