

DAO Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13941c

Specification

DAO Antibody (Center) - Product Information

Application WB,E **Primary Accession** P14920 NP 001908.3 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 39474 Antigen Region 259-287

DAO Antibody (Center) - Additional Information

Gene ID 1610

Other Names

D-amino-acid oxidase, DAAO, DAMOX, DAO, DAO, DAMOX

Target/Specificity

This DAO antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 259-287 amino acids from the Central region of human DAO.

Dilution

WB~~1:1000

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

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

DAO Antibody (Center) - Protein Information

Name DAO

Synonyms DAMOX



Function Regulates the level of the neuromodulator D-serine in the brain. Has high activity towards D-DOPA and contributes to dopamine synthesis. Could act as a detoxifying agent which removes D-amino acids accumulated during aging. Acts on a variety of D-amino acids with a preference for those having small hydrophobic side chains followed by those bearing polar, aromatic, and basic groups. Does not act on acidic amino acids.

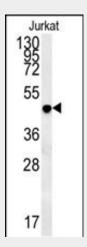
Cellular Location Peroxisome.

DAO Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DAO Antibody (Center) - Images

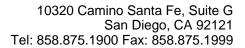


DAO Antibody (Center) (Cat. #AP13941c) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the DAO antibody detected the DAO protein (arrow).

DAO Antibody (Center) - Background

This gene encodes the peroxisomal enzyme D-amino acid oxidase. The enzyme is a flavoprotein which uses flavin adenine dinucleotide (FAD) as its prosthetic group. Its substrates include a wide variety of D-amino acids, but it is inactive on the naturally occurring L-amino acids. Its biological function is not known; it may act as a detoxifying agent which removes D-amino acids that accumulate during aging. In mice, it degrades D-serine, a co-agonist of the NMDA receptor. This gene may play a role in the pathophysiology of schizophrenia.

DAO Antibody (Center) - References





Kim, B., et al. Psychiatry Res 179(2):121-125(2010)
Caldinelli, L., et al. Protein Sci. 19(8):1500-1512(2010)
Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)
Ohnuma, T., et al. Schizophr. Res. 118 (1-3), 300-302 (2010):
Mitchell, J., et al. Proc. Natl. Acad. Sci. U.S.A. 107(16):7556-7561(2010)