

DAO Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13941c**Specification**

DAO Antibody (Center) Blocking peptide - Product InformationPrimary Accession [P14920](#)**DAO Antibody (Center) Blocking peptide - Additional Information****Gene ID** 1610**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13941c was selected from the Center region of DAO. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

DAO Antibody (Center) Blocking peptide - 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

DAO Antibody (Center) Blocking peptide - Images

DAO Antibody (Center) Blocking peptide - Background

This gene encodes the peroxisomal enzyme D-amino acidoxidase. The enzyme is a flavoprotein which uses flavin adeninedinucleotide (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) Blocking peptide - 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)