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

Specification

DAO Antibody (Center) Blocking peptide - Product Information

Primary 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.

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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 includea wide variety of D-amino acids, but it is inactive on thenaturally occurring L-amino acids. Its biological function is notknown; it may act as a detoxifying agent which removes D-aminoacids that accumulate during aging. In mice, it degrades D-serine,a co-agonist of the NMDA receptor. This gene may play a role in thepathophysiology 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)