

Bioactive

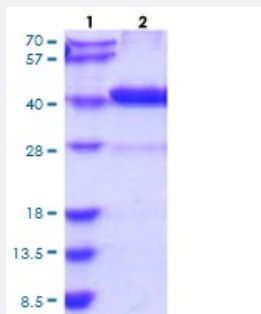
Full-Length

DAO (Human) Recombinant Protein

Catalog # P7957

Size 50 ug

Applications



Specification

Product Description

Human DAO (P14920, 1 a.a. - 347 a.a.) full length recombinant protein with His tag expressed in *Escherichia coli*.

Sequence

MRVVVIGAGVIGLSTALCIHERYHSLQPLDIKVYADRFTPLTTTDVAAGLWQPYLSDPNNPQEAD
WSQQTFDYLLSHVHSPNAENLGLFLISGYNLFHEAIPDPSWKDVLGFRKLTPRELDMPDYGYG
WFHTSLILEGKNYLQWLTERLTERGVKFFQRKVESFEEVAREGADVIVNCTGVWAGALQRDPLL
QPGRGQIMKVDAPWMKHFILTHDPERGIYNSPYIIPGTQTVTLGGIFQLGNWSELNNIQDHNTWEG
CCRLEPTLKNARIIGERTGFRPVRPQIRLEREQLRTGPSNTEVIHNYGHGGYGLTIHWGCALEAAKL
FGRILEEKKLSRMPPSHL

Host

Escherichia coli

Theoretical MW (kDa)

41.6

Form

Liquid

Preparation Method

Escherichia coli expression system

Purity

> 90% by SDS-PAGE

Activity

Specific activity is > 3.5 unit/mg, in which one unit will oxidatively deaminate 1.0 umole of D-alanine to pyruvate per minute at pH 8.5 at 37°C, in the presence of catalase.

Quality Control Testing

3 ug by SDS-PAGE under reducing condition and visualized by Coomassie blue stain.

Storage Buffer

In 20mM Tris-HCl pH 8.0 (20% glycerol, 1 mM DTT)

Storage Instruction

Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — DAO

Entrez GeneID[1610](#)**Protein Accession#**[P14920](#)**Gene Name**

DAO

Gene Alias

DAAO, DAMOX, MGC35381, OXDA

Gene Description

D-amino-acid oxidase

Omim ID[124050](#) [181500](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

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. [provided by RefSeq]

Other Designations

-

Pathway

- [Arginine and proline metabolism](#)
- [D-Arginine and D-ornithine metabolism](#)
- [Glycine](#)

- [Metabolic pathways](#)

Disease

- [Autistic Disorder](#)
- [Bipolar Disorder](#)
- [Brief Psychiatric Rating Scale](#)
- [Celiac Disease](#)
- [Cognition](#)
- [Crohn Disease](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Intelligence Tests](#)
- [Mood Disorders](#)
- [Neuropsychological Tests](#)
- [Personality Tests](#)
- [Psychotic Disorders](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Schizotypal Personality Disorder](#)
- [Weight Gain](#)