Creative Enzymes®

D-amino acid oxidase from Human, Recombinant

Cat. No. NATE-1653

Lot. No. (See product label)

Introduction

Description	D-amino-acid oxidase (DAAO) is a peroxisomal enzyme which uses flavin adenine dinucleotide (FAD) as a cofactor and oxidizes D-amino acids to the corresponding imino acids, producing ammonia and hydrogen peroxide. Its substrates include a wide variety of D-amino acids, but it is inactive on the naturally occurring L-amino acids. It has been suggested that it is involved in acid base balance in the kidney or it could act as a detoxifying agent which removes D-amino acids accumulated during aging.
Synonyms	DAAO; DAO; OXDA; DAMOX; D-Amino Acid Oxidase; EC 1.4.3.3; 9000-88-8; ophio-amino-acid oxidase; L-amino acid:O2 oxidoreductase

Product Information

Species	Human
Source	E. coli
Form	Liquid
Formulation	In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.
EC Number	EC 1.4.3.3
Molecular Weight	41.6 kDa
Purity	> 90% by SDS-PAGE
Activity	> 3.5 units/mg
Concentration	0.5 mg/ml
Unit Definition	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.

Storage and Shipping Information

Storage	Store at +4°C for short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freeze/thaw cycles.