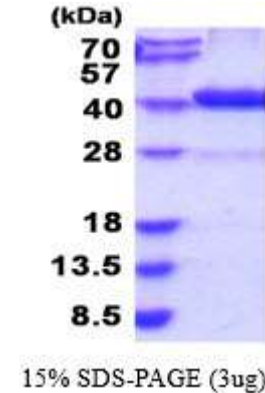


D-amino acid oxidase, human recombinant

CATALOG NO:	P1052-10 10 µg P1052-50 50 µg
ALTERNATE NAMES:	DAMOX, DAO, OXDA
CONCENTRATION:	0.5 mg/ml (determined by Bradford assay)
SOURCE:	<i>E.coli</i> expressed recombinant DAAO protein, fused to His-tag at N-terminus (1-347aa).
PURITY:	> 90% by SDS-PAGE
MOL. WEIGHT:	This protein is fused with 6x His tag at N terminus and the protein has a calculated MW of 41.6 kDa (367aa).
FORM:	Liquid
FORMULATION:	In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 20% glycerol
STORAGE CONDITIONS:	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.
SEQUENCE:	MGSSHHHHHH SSSLVPRGSH MRVVVIGAGV IGLSTALCIH ERYHSVLQPL DIKVYADRFT PLTTTDDVAAG LWQPYLSDPN NPQEADWSQQ TFDYLLSHVH SPNAENLGLF LISGYNLFHE AIPDPSWKDT VLGFRKLTPR ELDMFDPDYGW GWFHTSLILE GKNYLQWLTE RLTERGVKFF QRKVESFEEV AREGADVIVN CTGVWAGALQ RDPLLQPGRG QIMKVDAPWM KHFILTHDPE RGIYNSPYII PGTQTVTLGG IFQLGNWSEL NNIQDHNTIW EGCCRLEPTL KNARIIGERT GFRPVRPQIR LEREQLRTGP SNTEVIHNYG HGGYGLTIHW GCALEAAKLF GRILEEKKLS RMPPSHL
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. Recombinant human DAAO protein, fused to His-tag at N-terminus, was expressed in <i>E.coli</i> and purified by using conventional chromatography.
BIOLOGICAL ACTIVITY:	Specific activity is > 3.5 units/mg, in which one unit will oxidatively deaminate 1.0 umole of D-alanine to pyruvate per minute at pH 8.5 at 37C, in the presence of catalase.



Human recombinant D-amino acid oxidase

RELATED PRODUCT:

- E. Coli Recombinant Thioredoxin 1 (Cat. No. 6329-50)
- E. Coli Recombinant TRXB (Cat. No. 6331-100)
- Human Recombinant PRDX 1 (Cat. No. 6323-100)
- Human Recombinant PRDX 2 (Cat. No. 6319-100)
- Human Recombinant PRDX 3 (Cat. No. 6320-100)
- Human Recombinant PRDX 4 (Cat. No. 6324-100)
- Human Recombinant PRDX 5 (Cat. No. 6321-100)
- Human Recombinant PRDX 6 (Cat. No. 6322-100)
- Human Recombinant Thioredoxin (Cat. No. 6305-100)
- Human Recombinant Thioredoxin 2 (Cat. No. 6318-100)
- Human Recombinant TXNRD1 (Cat. No. 6330-100)
- Thioredoxin isoform 1 (Trx), Active, Human Recombinant (Cat. No. P1039-100)

FOR RESEARCH USE ONLY! Not to be used on humans.