

32-2254: DAAO Recombinant Protein

Alternative Name : D-amino-acid oxidase,DAMOX,DAAO,DAO,OXDA,MGC35381.

Description

Source : Escherichia Coli. DAAO Human Recombinant fused with 20 amino acid His tag at N-terminus produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 367 amino acids (1-347 a.a.) and having a molecular mass of 41.6kDa. The DAAO is purified by proprietary chromatographic techniques. DAAO is a peroxisomal enzyme which uses FAD (flavin adenine dinucleotide) as a cofactor and oxidizes D-amino acids to the corresponding amino acids, producing ammonia and hydrogen peroxide. DAAO substrates include an extensive array of D-amino acids, but it is inactive on the naturally occurring L-amino acids. DAAO acts on a variety of D-amino acids especially on those having small hydrophobic side chains followed by those bearing polar, aromatic, and basic groups; however it doesn't act on acidic amino acids. DAAO may be involved in acid base balance in the kidney or it could act as a detoxifying agent which removes D-amino acids accumulated during aging. DAAO regulates the neuromodulator D-serine level in the brain. DAAO is highly active towards D-DOPA and contributes to dopamine synthesis. Creatinine inhibits the DAAO in uremia. DAAO may also have a role in the pathophysiology of schizophrenia, but not in bipolar disorder.

Product Info

Amount :	10 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	The DAAO solution contains 20mM Tris-HCl buffer (pH 8.0), 20% glycerol and 1mM DTT.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	MGSSHHHHHH SSGLVPRGSH MRVVVIGAGV IGLSTALCIH ERYHSLVQLPL DIKVYADRFT PLTTTDVAAG LWQPYLSDPN NPQEADWSQQ TFDYLLSHVH SPNAENLGLF LISGYNLFHE AIPDPSWKDT VLGFRKLTPR ELDMPDYG YGWFTSLILE GKNYLQWLTE RLTERGVKFF QRKVESFEV AREGADVIVN CTGVWAGALQ RDPLLQPGRG QIMKVDAPWM KHFILTHDPE RGIYNSPYII PGTQTVTLGG IFQLGNWSEL NNIQDHNTIW EGCCRLEPTL KNARIIGERT GFRPVRPQIR LEREQLRTGP SNTVEIHNYG HGGYGLTIHW GCALEAAKLF GRILEEKKLS RMPPSHL.

