

32-6725: DAAO Human, Active

Application : Functional Assay

Alternative Name : D-Amino Acid Oxidase 2, D-Amino-Acid Oxidase, EC 1.4.3.3, DAMOX, DAAO, EC 1.4.3, OXDA.

Description

Source: Escherichia Coli.

Sterile Filtered clear solution.

D-amino-acid oxidase or DAAO is an enzyme that oxidizes D-amino acids to their imino acids form while using FAD (flavin adenine dinucleotide) as a co-factor, resulting in the formation of ammonia & hydrogen peroxide. the enzyme may take part in keeping the balance of acid base in the kidney tissue. Another role is to detoxifying molecules that abolish D-amino acids aggregated while the cell ages.

DAAO Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 367 amino acids (1-347) and having a molecular mass of 41.6 kDa. DAAO Human is fused to a 20 amino acid His-Tag at N-terminus and purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : DAAO Human protein (0.5mg/ml) is formulated in 20mM Tris-HCl buffer (pH 8.0), 20% glycerol & 1mM DTT. .

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks.

Amino Acid : MGSSHHHHHH SSGLVPRGSH MRVVVIGAGV IGLSTALCIH ERYHSLVQLPL DIKVYADRFT PLTTTDVAAG LWQPYLSDPN NPQEADWSQQ TFDYLLSHVH SPNAENLGLF LISGYNLFHE AIPDPSWKDT VLGFRKLTTPR ELDMFDPDYG GWFHSTLILE GKNYLQWLTE RLTERGVKFF QRKVESFEV AREGADVIVN CTGVWAGALQ RDPLLQPGRG QIMKVDAPWM KHFILTHDPE RGIYNSPYII PGTQTVTLGG IFQLGNWSEL NNIQDHNTIW EGCCRLEPTL KNARIIGERT GFRPVRPQIR LEREQLRTGP SNTEVIHNYG HGGYGLTIHW GCALEAAKLF GRILEEKKLS RMPPSHL.

Application Note

Specific activity is > 3.5unit/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.