

Recombinant Human D-Amino-Acid Oxidase/DAO Protein (His Tag)

Catalog Number: PKSH032342

Note: Centrifuge before opening to ensure complete recovery of vial contents.

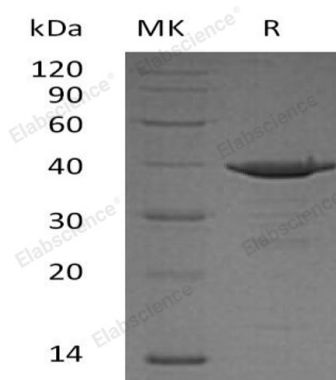
Description

| | |
|----------------------|---|
| Species | Human |
| Source | E.coli-derived Human DAO protein Met 1-Leu347, with an N-terminal His |
| Calculated MW | 41.6 kDa |
| Observed MW | 40 kDa |
| Accession | P14920 |
| Bio-activity | Not validated for activity |

Properties

| | |
|----------------------|---|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Concentration | Subject to label value. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles. |
| Shipping | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C. |
| Formulation | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 20% Glycerol, 1mM DTT, 2mM EDTA, pH 8.0. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

D-Amino-Acid Oxidase (DAO) belongs to the DAMOX/DASOX family. DAO is a peroxisomal enzyme which functions as a homodimer to oxidizes D-amino acids to the corresponding imino acids, producing ammonia and hydrogen peroxide. D-amino-acid oxidase regulates the level of the neuromodulator D-serine in the brain, has a high activity towards D-DOPA and contributes to dopamine synthesis. D-amino-acid oxidase could act as a detoxifying agent which removes D-amino acids accumulated during aging. It also acts on a variety of D-amino acids with a preference for those having small hydrophobic side chains followed by those bearing polar, aromatic, and basic groups.