



Recombinant Protein Technical Manual
Recombinant Human D-Amino-Acid Oxidase/DAO
Protein (His Tag)
RPES2081

Product Data:

Product SKU: RPES2081

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P14920

Protein Information:

Molecular Mass: 41.6 kDa

AP Molecular Mass: 40 kDa

Tag: N-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 TrisHCl, 150mM NaCl, 1mM DTT, 2mM EDTA, pH 8.0 .

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: D-Amino-Acid Oxidase; DAAO; DAMOX; DAO

Immunogen Information:

Sequence: Met 1-Leu347

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 amino 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.