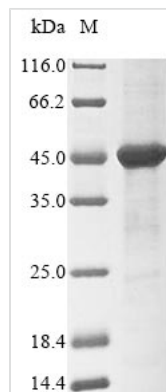




Recombinant Rat D-amino-acid oxidase (Dao)

Product Code	CSB-EP006494RA
Relevance	Regulates the level of the neuromodulator D-serine in the brain. Has high activity towards D-DOPA and contributes to dopamine synthesis. Could act as a detoxifying agent which removes D-amino acids accumulated during aging. 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. Does not act on acidic amino acids.
Abbreviation	Recombinant Rat Dao protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	O35078
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MRVAVIGAGVIGLSTALCIHERYHPAQPLHMKIYADRFTPFTTSDVAAGLWQPY LSDPSNPQEAewnqqTFDHLQsclHSPNAEKMGALISGYNLFRDEVPDPFW KSTVLGFRKLTPSELDMFPDYSYGWFNTSLLEGKSYLSWLTERLTERGVKFI HRKVASFEEVVRGGVDVIINCTGVWAGALQADASLQPGRGQIIQVEAPWIKHFI LTHDPSLGIYNsPYIIPGSKTVTLGGVFQLGNWSELNSVHDHNTIWKSCCQLEP TLKNARIMGELTGFRPVRPQVRLERERLRFGSSSAEVIHNYGHGGYGLTIHWG CAMEAANLFGKILEEKNLSRMPPSHL
Research Area	Metabolism
Source	E.coli
Target Names	Dao
Protein Names	Dao1
Expression Region	1-346aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	45.8 kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Our Recombinant Rat D-amino-acid oxidase (DAAO) is an essential component in the research arena of Metabolism. The protein, encoded by the 'Dao' gene in Rat species, is integral to the metabolism of D-amino acids, and is known for its catalytic role in oxidizing D-amino acids into their corresponding keto acids. This makes it a valuable tool for understanding metabolic pathways and interactions.

The protein is expressed from E.coli, capturing the full length of the protein from amino acid 1 to 346. In order to increase its versatility in various experimental protocols, the DAAO protein is tagged on the N-terminal with a 10xHis tag and on the C-terminal with a Myc tag, aiding in its purification and detection. Our product boasts a purity greater than 85%, as determined by SDS-PAGE, reinforcing its reliability. You can choose to have the Recombinant Rat DAAO protein in a liquid or lyophilized powder form, allowing for a flexible application in different experimental setups.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.