

## Recombinant Human DAO Protein (Sumo Tag)

**Catalog Number:** PDEH101147

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

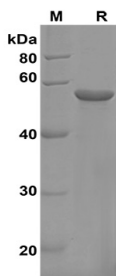
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human DAO protein Met1-Leu347 with an N-terminal Sumo
<b>Calculated MW</b>	51.06 kDa
<b>Observed MW</b>	55 kDa
<b>Accession</b>	P14920
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



SDS-PAGE analysis of Human DAO proteins, 2µg/lane of Recombinant Human DAO proteins, was resolved with SDS-PAGE under reducing conditions, showing bands at 55 KD

### 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.

### For Research Use Only