

---

**Product Data Sheet**


---

Product Name: HAO1 Human, Active

Cat. No.: GP21774

Batch No.: 1

**Product Data**

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Hydroxyacid oxidase 1; HAOX1; Glycolate oxidase; GOX; HAO1; GOX1.		
Amino Acid Sequence	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMLPR LICINDYEQH AKSVLPKSIY DYYRSGANDE ETLADNIAAF SRWKLYPRMLRNVAETDLST SVLGQRVSMP ICVGATAMQR MAHVDGELAT VRACQSLGTG MMLSSWATSS IEEVAEAGPE ALRWLQLYIY KDREVTKKLVRQAEKMGYKA IFVTVDTPYL GNRLDDVRNR FKLPPQLRMK NFETSTLSFS PEENFGDDSG LAAYVAKAID PSISWEDIKW LRRLTSLPIVAKGILRGDDA REAVKHGLNG ILVSNHGARQ LDGVPATIDV LPEIVEAVEG KVEVFLDGGV RKGTDVLKAL ALGAKAVFVG RPIVWGLAFQGEKGVQDVLE ILKEEFRLAM ALSGCQNVKV IDKTLVRKNP LAVSKI.		
Formulation	HAO1 protein solution (1mg/ml) contains 20% glycerol, 20mM Tris-Hcl (pH8.0) and 0.5M NaCl.		

**Introduction**

Glycolate oxidase (HAO1) is a part of the superfamily of the alpha hydroxy acid oxidases (HAO) enzymes. HAO1 catalyses the FMN mediated oxidation of glycolate to glyoxylate and glyoxylate to oxalate by reducing oxygen to hydrogen peroxide. HAO1 is expressed mainly in the liver and pancreas and is most active on twocarbon substrates such as glycolate. HAO1 is the main cause of hyperoxaluria, a disorder in which large deposits of calcium oxalate form kidney stones.

**Biological Activity**

Specific activity is > 3000 pmol/min/ug, and defined as the amount of enzyme that oxidize glyoxylate at pH 8.0 at 25C.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

---

## Product Data Sheet

---

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

### Background

HAO1 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 406 amino acids (1-370 a.a) and having a molecular mass of 45.0kDa. HAO1 is fused to a 36 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

**Caution: Product has not been fully validated for medical applications. For research use only.**

**Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com**

**Address: 10292 Central Ave. #205, Montclair, CA, USA**