
Product Data Sheet

Product Name: HAO1 Mouse
 Cat. No.: GP26159
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	withIcePacks
Synonyms	(S)-2-hydroxy-acid oxidase; EC 1.1.3.15, Glycolate oxidase, GOX, GOX1MGC142227;GOXMGC142225, HAO1, HAO-1, HAOX1, hydroxyacid oxidase (glycolate oxidase) 1, hydroxyacid oxidase 1, Hydroxyacid Oxidase1, Hydroxyacid Oxidase-1.		
Amino Acid Sequence	MGSSHHHHHH SSGLVPRGSH MGSMLPRLVC ISDYEQHVRS VLQKSVYDYY RSGANDQETL ADNIQAFSRW KLYPRMLRNV ADIDLSTSVL GQRVSMPICV GATAMQCM AH VDGELATVRA CQTMGTGMML SSWATSSIEE VAEAGPEALR WMQLYIYKDR EISRQIVKRA EKQGYKAIFV TVDTPYLGNR IDDVRNRFKL PPQLRMKNFE TNDLAFSPKG NFGDNSGLAE YVAQAIDPSL SWDDITWLRR LTSLPIVVKG ILRGDDAKEA VKHGVDGILV SNHGARQLDG VPATIDVLPE IVEAVEGKVE VFLDGGVRKG TDVLKALALG AKAVFVGRPI IWGLAFQGEK GVQDVLEILK EEFRLAMALS GCQNVKVIDK TLVRKNPLAV SKI.		
Formulation	HAO1 protein (1mg/ml) is containing Phosphate Buffered Saline (pH 7.4) and 10% glycerol.		

Introduction

Hydroxyacid Oxidase 1 (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 > 1,000 pmol/min/ug, and defined as the amount of enzyme that

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

oxidize glyoxylate at pH 8.0 at 25C.

Stability

Store at 46yC if entire vial will be used within 2-4 weeks. Store, frozen at -206yC 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 Mouse Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 393 amino acids (1-370) and having a molecular mass of 43.4 kDa. HAO1 is fused to a 23 amino acid His-Tag at N-terminus and 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