
Product Data Sheet

Product Name: GLO1 Human, Active

Cat. No.: GP21680

Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	GLYI; GLOD1; GLO1; Glyoxalase-1; Lactoylglutathione lyase; Methylglyoxalase; Aldoketomutase; Ketone-aldehyde mutase; Glyoxalase I; S-D-lactoylglutathione methylglyoxal lyase; Glx I.		
Amino Acid Sequence	MAEPQPPSGG LTDEAALSCC SDADPSTKDF LLQQTMLRVK DPKKSLDFYT RVLGMTLIQK CDFPIMKFSL YFLAYEDKND IPKEKDEKIAWALSRKATLE LTHNWTGTEDD ETQSYHNGNS DPRGFGHIGI AVPDVYSACK RFEELGVKVFV KKPDDGKMKG LAFIQDPDGY WIEILNPNKM ATLM.		
Formulation	Glyoxalase-1 solution containing 20mM Tris-HCl pH-8, 1mM DTT and 10% glycerol.		

Introduction

GLO1 is involved in the catalysis and formation of S-lactoyl-glutathione from methylglyoxal condensation and reduced glutathione. GLO1 is linked to HLA and is localized to 6p21.3-p21.1, between HLA and the centromere. GLO1 enzyme is abundantly expressed and present in numerous tumor cell lines, in which its concentration is often upregulated ubiquitously. GLO1 is a major susceptible gene for autism in an ethnic Chinese population from Taiwan. GLO1 might be involved in the pathophysiology of mood disorders. GLO1 plays a role in the pathophysiology of mood disorders. Overexpression of GLO1 is associated with kidney tumor.

Biological Activity

Specific activity: > 400 units/mg. One unit will form 1.0 μmol of S-lactoylglutathione from methylglyoxal and reduced glutathione per minute at pH 6.5 at 25°C

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer

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

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

Glyoxalase-I Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 184 amino acids and having a molecular mass of 20.7 kDa. Glyoxalase-1 is 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