Product Data Sheet

Product Name:	GlpK E. coli
Cat. No.:	GP22525
Batch No.:	1

Product Data

Purity	>98%	Source	Escherichia Coli.
Phycical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Glycerolkinase; glycerol 3-phosphotransferase; Glycerokinase; GK.		
Amino Acid Sequence	MGSSHHHHHHSSGLVPRGSH MGSMTEKKYIVALDQGTTSS RAVVMDHDAN IISVSQREFE QIYPKPGWVE HDPMEIWATQ SSTLVEVLAK ADISSDQIAAIGITNQRETT IVWEKETGKP IYNAIVWQCR RTAEICEHLK RDGLEDYIRS NTGLVIDPYF SGTKVKWILDHVEGSRERAR RGELLFGTVD TWLIWKMTQG RVHVTDYTNA SRTMLFNIHT LDWDDKMLEV LDIPREMLPEVRRSSEVYGQ TNIGGKGGTR IPISGIAGDQ QAALFGQLCV KEGMAKNTYG TGCFMLMNTG EKAVKSENGL LTTIACGPTGEVNYALEGAV FMAGASIQWL RDEMKLINDA YDSEYFATKV QNTNGVYVVP AFTGLGAPYW DPYARGAIFGLTRGVNANHI IRATLESIAY QTRDVLEAMQ ADSGIRLHAL RVDGGAVANN FLMQFQSDIL GTRVERPEVREVTALGAAYL AGLAVGFWQN LDELQEKAVI EREFRPGIET TERNYRYAGW KKAVKRAMAW EEHDE.		
Formulation	GlpK protein solution (1mg/ml) containing Phosphatebuffered saline (pH7.4),10% glycerol and 1mM DTT.		

Introduction

GlpKalso known as glycerol kinase, is a member of the FGGY kinase family. GlpKcatalyzes the transfer of a phosphate group from ATP to glycerol, therebyforming glycerol phosphate. Furthermore, this intermediate can then beconverted to dihydroxyacetone phosphate (DHAP), which is utilized in eitherglycolysis or gluconeogenesis. The activity of GlpK is affected by numerous metabolites.The non-competitive allosteric inhibition by fructose 1,6-bisphosphate (FBP) triggersmodifications in the quaternary structure of Glpk.

Stability

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

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

GlpK E. Coli Recombinant produced in E. coli is a single, non-glycosylated polypeptide chain containing 525 amino acids (1-502 a.a) and having a molecular mass of 58.6 kDa.GlpK is fused to a 23 amino acid His-tag at N-terminus& purified by proprietary chromatographic techniques.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA