

MATRIX  
SCIENCE

MASCOT Search Results

Protein View: gi|216558

glycerol-3-phosphate dehydrogenase [Escherichia coli]

Database: NCBInr  
Score: 73  
Nominal mass (M<sub>r</sub>): 56773  
Calculated pI: 8.84  
Taxonomy: [Escherichia coli](#)

Sequence similarity is available as [an NCBI BLAST search of gi|216558 against nr](#).

Search parameters

MS data file: T.mgf  
Enzyme: Trypsin: cuts C-term side of KR unless next residue is P.  
Fixed modifications: [Carbamidomethyl \(C\)](#)  
Variable modifications: [Oxidation \(M\)](#)

Protein sequence coverage: 4%

Matched peptides shown in **bold red**.

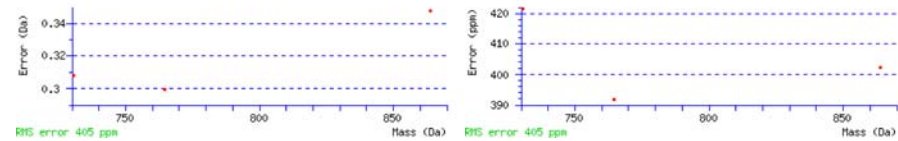
1 METKDLIVIG GGINGAGIAA DAGGRGLSVL MLEAQDLACA TSSASSKL**LIH**  
51 **GGLR**YLEHYE FRLVSEALAE REVLLKMAPH IAFPMRFRLP HRPHLRPAWM  
101 IRIGLFMYDH LKGRKTSLPGS TGLRFGANSV LKPEIKRGFE YSDCWVDDAR  
151 LVLANAQMVV **RKGGEVLTRT** RATSARRENG LWIVEAEDID TGKKYSWQAR  
201 GLVNATGPWV KQFFDDGMHL PSYPGIRLIK **GSHIVVPRVH** TQKQAYILQN  
251 EDKRIVFVIP WMDEFSIIQT TDVEYKGDPK AVKIEESEIN YLLNVYNTHF  
301 KKQLSRDDIV WTYSGVRPLC DDES DSPHVL PVITPLIFMM KMAKHRCRY  
351 SAAKLTTRYK LAEHALEKLT PYYQGIGPAW TKESVLPGGA IEGDRDDYAA  
401 RLRRRYPFLT ESLARHYART YGSNSELLLG NAGTVSDLGE DFGHEFYEAE  
451 LKYLVDHEWV RRAARRPVAS HKTRHVAKCG STISCESVAG GVYAAEVIAG  
501 VVN

Unformatted sequence string: **503 residues** (for pasting into other applications).

Sort peptides by ☒ Residue Number ☐ Increasing Mass ☐ Decreasing Mass

Show predicted peptides also

Query	Start - End	Observed	Mr (expt)	Mr (calc)	Delta	M Score	Expect	Rank	U	Peptide
<a href="#">21</a>	48 - 54	383.3900	764.7654	764.4657	0.2998	0	16	37	<a href="#">1</a>	U K.LIHGGLR.Y
<a href="#">17</a>	163 - 169	366.3600	730.7054	730.3974	0.3081	0	38	0.3	<a href="#">1</a>	U K.GGEVLTR.T
<a href="#">26</a>	231 - 238	432.9300	863.8454	863.4977	0.3477	0	19	53	<a href="#">1</a>	U K.GSHIVVPR.V



LOCUS BAA00327 503 aa linear BCT 26-JUL-2016  
DEFINITION glycerol-3-phosphate dehydrogenase [Escherichia coli K-12].  
ACCESSION BAA00327  
VERSION BAA00327.1  
DBSOURCE locus ECOGLPDA accession D00425.1  
KEYWORDS .  
SOURCE Escherichia coli K-12  
ORGANISM Escherichia coli K-12  
Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Escherichia.  
REFERENCE 1 (residues 1 to 503)  
AUTHORS Choi,Y.L., Kawase,S., Kawamukai,M., Utumi,R., Sakai,H. and Komano,T.  
TITLE Nucleotide sequence of the glycerol-3-phosphate dehydrogenase gene of Escherichia coli and regulation by the cAMP-CRP complex  
JOURNAL Agric. Biol. Chem. 53, 1135-1143 (1989)  
COMMENT Submitted in computer readable form by T. Komano on 26-May-1989. The glpD gene had the homology among genes of the known flavo enzyme with respect to the flavin-binding domein (glpD vs. glpA, glpB and GR; 59, 24 and 30% homology, respectively at the amino acid label). The putative glgP gene (ORFX2) was homologous to rabbit glgP, human glgP, potato glgP and E. coli malP (50.6, 51.3, 40.5 and 46.8%, respectively at the amino acid label).  
FEATURES  
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