

MATRIX
SCIENCE

MASCOT Search Results

Protein View: gi|446058921

glycerol kinase [Escherichia coli]

Database: NCBInr

Score: 524

Nominal mass (M_r): 56496

Calculated pI: 5.36

Taxonomy: [Escherichia coli](#)

This protein sequence matches the following other entries:

• [gi|323153997](#) from [Escherichia coli EPECa14](#)

Sequence similarity is available as [an NCBI BLAST search of gi|446058921 against nr](#).

Search parameters

MS data file: 7-1.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: 26%

Matched peptides shown in **bold red**.

1 MTEKKYIVAL DQGTSSRAV VMDHDANIIS VSQR**EFEQIY** PKLGWVEHDP

51 MEIWTQSST LVEVLAKADI SSDQIAAIGI TNQR**ETTIWV** EKETGKPIYN

101 AIVWQCRRTA EICEHLKR**DG LEDYIR**SNLTG LVDPYFSGT KVK**WILDHVE**

151 **GSRE**RARRGE LLFGTVDTWL IWKMTQGR**VH VTDYTNASR**T MLFNIHTLDW

201 DDK**MLEVLDI** **PREMLPEVR**R **SSEVYGQ**TNI GKGKGTIRPI SGIAGDQQAA

251 LFGQLCVKEG MAKNTYGTGC FMLMNTGEKA VKSENGLLTT IACGPTGEVN

301 YALEGAVFMA GASIQWLRDE MKLINDAYDS EYFATKVQNT NGVYVVPAPT

351 GLGAPYWDPY ARG**AI****FGLTR** GVNANHII**RA TLESIA**YQTR DVLEAMQ**ADS**

401 **GIRL**HALRVD GGAVANNFLM QFQSDILGTR **VERPEV**REVT ALGAAYLAGL

451 AVGFQWNLDE LQEKAVIERE **FRPGIETTER** NYRYAGWKKA VKR**AMAWEEH**

501 **DE**

Unformatted sequence string: **502 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 |
|--------------------|-------------|----------|-----------|-----------|---------|-------|--------|----------|---|-----------------------------------|
| 43 | 35 - 42 | 527.5000 | 1052.9854 | 1052.5178 | 0.4676 | 0 | 16 | 1.8e+002 | 4 | U R.EFEQIYPK.L |
| 39 | 85 - 92 | 503.4800 | 1004.9454 | 1004.5179 | 0.4276 | 0 | 39 | 1.3 | 1 | R.ETTIVWEK.E |
| 37 | 119 - 126 | 490.9600 | 979.9054 | 979.4611 | 0.4444 | 0 | 46 | 0.2 | 1 | R.DGLDYIR.S |
| 49 | 144 - 153 | 606.5600 | 1211.1054 | 1210.6095 | 0.4960 | 0 | 36 | 2.1 | 1 | K.WILDHVEGSR.E |
| 53 | 179 - 189 | 632.0800 | 1262.1454 | 1261.6051 | 0.5403 | 0 | 46 | 0.23 | 1 | R.VHVTDTYNASR.T |
| 47 | 204 - 212 | 551.5600 | 1101.1054 | 1100.5900 | 0.5155 | 0 | 65 | 0.0026 | 1 | K.MLEVLDIRP.E + Oxidation (M) |
| 24 | 213 - 219 | 445.4300 | 888.8454 | 888.4375 | 0.4080 | 0 | 23 | 43 | 1 | R.EMLPEVR.R + Oxidation (M) |
| 57 | 221 - 233 | 670.6100 | 1339.2054 | 1338.6416 | 0.5639 | 0 | 45 | 0.22 | 1 | R.SSEVYGQTNIGGK.G |
| 58 | 221 - 233 | 447.4100 | 1339.2082 | 1338.6416 | 0.5666 | 0 | 21 | 55 | 1 | R.SSEVYGQTNIGGK.G |
| 26 | 363 - 370 | 417.9500 | 833.8854 | 833.4759 | 0.4095 | 0 | 57 | 0.017 | 1 | R.GAIFGLTR.G |
| 50 | 380 - 390 | 627.1100 | 1252.2054 | 1251.6459 | 0.5596 | 0 | 29 | 9.8 | 1 | R.ATLESIAVQTR.D |
| 52 | 391 - 403 | 711.1400 | 1420.2654 | 1419.6664 | 0.5991 | 0 | 45 | 0.24 | 1 | R.DVLEAMQADSGIR.L + Oxidation (M) |
| 33 | 431 - 437 | 442.9600 | 883.9054 | 883.4875 | 0.4179 | 0 | 22 | 45 | 2 | R.VERPEVR.E |
| 56 | 470 - 480 | 445.7600 | 1334.2582 | 1333.6626 | 0.5956 | 0 | 17 | 1.3e+002 | 4 | R.EFRPGIETTER.N |
| 48 | 494 - 502 | 567.4700 | 1132.9254 | 1132.4131 | 0.5123 | 0 | 41 | 0.56 | 1 | R.AMAWEEHDE.- + Oxidation (M) |

LOCUS WP_000136776 502 aa linear BCT 14-MAY-2013

DEFINITION glycerol kinase [Escherichia coli].

ACCESSION WP_000136776

VERSION WP_000136776.1

KEYWORDS RefSeq.

SOURCE Escherichia coli

ORGANISM Escherichia coli

Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacterales; Enterobacteriaceae; Escherichia.

COMMENT REFSEQ: This record represents a single, non-redundant, protein sequence which may be annotated on many different RefSeq genomes from the same, or different, species.
COMPLETENESS: full length.

FEATURES

Location/Qualifiers

source1..502/organism="Escherichia coli"/db_xref="taxon:562"

Protein1..502/product="glycerol kinase"/calculated_mol_wt=56116

Region1..498/region_name="glpK"/note="glycerol kinase; Provisional; PRK00047"/db_xref="CDD:234594"

Mascot: <http://www.matrixscience.com/>

http://mascot/mascot/cgi/protein_view.pl?file=..%2Fdata%2F20180206%2FF004362.dat&hit=gi%7C446058921&db_idx=1&px=1&ave_thresh=51&... 1/1