

MATRIX SCIENCE MASCOT Search Results

Protein View: gj|446211927

fructose-bisphosphate aldolase [Escherichia coli]

Database: NCBIInr
Score: 129
Nominal mass (M_r): 31062
Calculated pI: 5.93
Taxonomy: [Escherichia coli](#)

Sequence similarity is available as [an NCBI BLAST search of gj|446211927 against nr.](#)

Search parameters

MS data file: ii.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: 11%

Matched peptides shown in **bold red**.

```

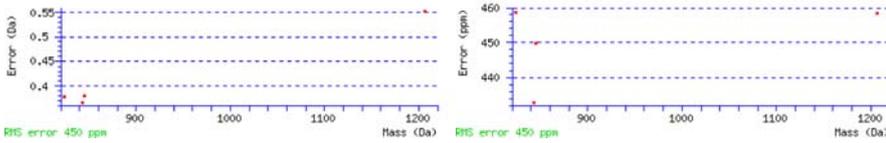
1  MYVVSTKQML NNAQRGGYAV PAFNIHNLET MQVVTETAAN LHAPVVIAGT
51  PGTFTHAGTE NLLALVLSAMA KHYHHP LAIH LDHHTK PDDI AQKVRSGVRS
101 VMXDASHLPF AQNISRVKEV VDFCHRFDVS VEAEGLQLGG QEDDVQVNEA
151 DAFYTNPAQA REFPAEATGID SLAVAIGTAH GMYASAPALD FSRLENIRQW
201 VNLPLVLHGA SGLSTRDIQQ TIKLGIICKIN VATELKNAFS QALKNYLTEH
251 PEATDPRDYL QSAKSAMRDV VSKVIADCGC EGRA
    
```

Unformatted sequence string: **284 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
28	1 - 7	422.4000	842.7854	842.4208	0.3647	0	23	26	1	U -_MYVVSTK.Q + Oxidation (M)
29	217 - 223	423.4300	844.8454	844.4654	0.3800	0	37	1.1	1	U K.DIQQTIK.L
27	258 - 264	412.9000	823.7854	823.4076	0.3779	0	20	28	1	U R.DYLSAK.S
15	274 - 284	604.5400	1207.0654	1206.5121	0.5533	1	50	0.071	1	U K.VIADCGCEGRA.-



```

LOCUS       WP_000289782          284 aa          linear   BCT 23-JUL-2017
DEFINITION tagatose bisphosphate family class II aldolase [Escherichia coli].
ACCESSION  WP_000289782
VERSION   WP_000289782.1
KEYWORDS  RefSeq.
SOURCE    Escherichia coli
ORGANISM  Escherichia coli
           Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
           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
     source           1..284
                     /organism="Escherichia coli"
                     /db_xref="taxon:562"
     Protein          1..284
                     /product="tagatose bisphosphate family class II aldolase"
     Region           1..284
                     /region_name="gatY"
                     /note="tagatose-bisphosphate aldolase; Reviewed; PRK09195"
                     /db_xref="CDD:181690"
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                     236..237,240,244,247)
                     /site_type="other"
                     /note="intersubunit interface [polypeptide binding]"
                     /db_xref="CDD:238477"
     Site             order(82..83,179..181,183,208..209,211,230,232..233)
                     /site_type="active"
                     /db_xref="CDD:238477"
     Site             order(83,180,208)
                     /site_type="other"
                     /note="zinc binding site [ion binding]"
                     /db_xref="CDD:238477"
     Site             order(179,181,183,209,211)
                     /site_type="other"
                     /note="Na+ binding site [ion binding]"
                     /db_xref="CDD:238477"
    
```

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