

MATRIX SCIENCE MASCOT Search Results

Protein View: gi|485723954

malate dehydrogenase [Escherichia coli]

Database: NCBInr
Score: 207
Nominal mass (M_r): 32532
Calculated pI: 5.62
Taxonomy: Escherichia coli

This protein sequence matches the following other entries:

- gi|323966415 from Escherichia coli M863
- gi|327251329 from Escherichia coli STEC_7v
- gi|386140017 from Escherichia coli 1.2741
- gi|914355797 from Escherichia coli

Sequence similarity is available as [an NCBI BLAST search of gi|485723954 against nr](#).

Search parameters

MS data file: 20.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: 20%

Matched peptides shown in **bold red**.

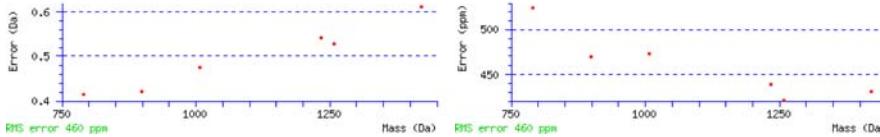
```
1 MKVAVLGAAG GQQLALLLL KTQLPGGSEL SLYDIAPVTP GVAVDLSHIP
51 TAVKIKGFSG EDATPALEGA DVVLISAGVA RKPGMDRSGL FVNAGIVKN
101 LVQQVAKTCP KACIGIITNP VNTTVAIAAE VLKKAGVYDK NKLFGVTTL
151 IIRSNTFVAE LKGKQGEVE VPVIQGHSGV TILPLLSQVP GVSFTEQEV
201 ELTKRIQNAG TEVVEAKAGG GSATLSMQAA AARFGLSILVR ALQGEQGVVE
251 CAYVEGDGY ARFFSQPLL GKNGVEERKS IGTLSPEQN ALEGMLDTLK
301 KDIALGEEFV NK
```

Unformatted sequence string: **312 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
<input checked="" type="checkbox"/> 28	100 - 107	450.4800	898.9454	898.5236	0.4218	0	40	0.47	<u>1</u>	K.NLVQQVAK.T
<input checked="" type="checkbox"/> 30	154 - 162	505.0100	1008.0054	1007.5287	0.4767	0	23	19	<u>1</u>	R.SNTFVAEL.R.G
<input checked="" type="checkbox"/> 41	206 - 217	630.1000	1258.1854	1257.6565	0.5290	0	36	1.1	<u>1</u>	R.IQNAGTEVVEAK.A
<input checked="" type="checkbox"/> 48	218 - 233	711.6500	1421.2854	1420.6729	0.6126	0	52	0.024	<u>1</u>	K.AGGGSATLSMGQAAAR.F + Oxidation (M)
<input checked="" type="checkbox"/> 23	234 - 240	396.4500	790.8854	790.4701	0.4153	0	17	66	<u>6</u>	R.FGLSILVR.A
<input checked="" type="checkbox"/> 38	302 - 312	618.0900	1234.1654	1233.6241	0.5413	0	39	0.45	<u>1</u>	K.DIALGEEFVNK.-



```
LOCUS WP_001354992            312 aa          linear    BCT 11-MAY-2013
DEFINITION malate dehydrogenase [Escherichia coli].
ACCESSION WP_001354992
VERSION  WP_001354992.1
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.
FEATURES Location/Qualifiers
source 1..312
        /organism="Escherichia coli"
        /db_xref="taxon:562"
Protein 1..312
        /product="malate dehydrogenase"
        /calculated_mol_wt=32250
Region 1..312
        /region_name="PRK05086"
        /note="malate dehydrogenase; Provisional"
        /db_xref="CDD:235340"
```

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