

MATRIX SCIENCE MASCOT Search Results

Protein View: gi|696588444

alkyl hydroperoxide reductase [Aeromonas lacus]

Database: NCBInr
Score: 135
Nominal mass (M_r): 20716
Calculated pI: 5.01
Taxonomy: Aeromonas lacus

Sequence similarity is available as an NCBI BLAST search of gi|696588444 against nr.

Search parameters

MS data file: 176.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: 19%

Matched peptides shown in bold red.

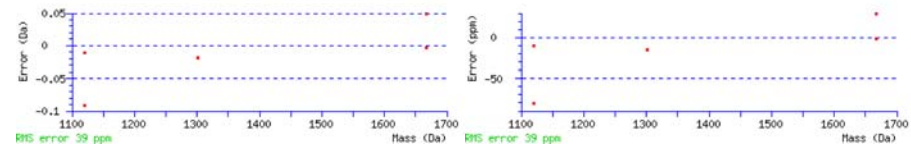
1 MSTYINTEIK PFNATAYHNG **KFVQVSDADL** KGKWSVVFY PADFTFVCPT
51 ELGDLADNYA DFQKLGVEIY AVSTDTHFTH **KAWHDTSDTI** QKIQYPMIGD
101 PTGTITRNFG VMIEEAGLAD RGTFFVIDPQG IIQIVEINAG GIGRDALELL
151 RKVK**AAQYVA** **AHPGEVCPAK** WKEGDATLAP SLDLVGKI

Unformatted sequence string: 188 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
18	22 - 31	561.2500	1120.4854	1120.5764	-0.0910	0	39	15	3		K.FVQVSDADLK.G
19	22 - 31	561.2900	1120.5654	1120.5764	-0.0110	0	46	2.6	1		K.FVQVSDADLK.G
22	82 - 92	651.3000	1300.5854	1300.6048	-0.0193	0	51	0.83	1	U	K.AWHDTSDTIQK.I
26	155 - 170	834.9100	1667.8054	1667.8090	-0.0035	0	33	40	1		K.AAQYVAHPGEVCPAK.W
27	155 - 170	556.9600	1667.8582	1667.8090	0.0492	0	37	16	1		K.AAQYVAHPGEVCPAK.W



LOCUS WP_033114482 188 aa linear BCT 07-FEB-2016
DEFINITION peroxiredoxin [Aeromonas lacus].
ACCESSION WP_033114482
VERSION WP_033114482.1
KEYWORDS RefSeq.
SOURCE Aeromonas lacus
ORGANISM Aeromonas lacus
Bacteria; Proteobacteria; Gammaproteobacteria; Aeromonadales;
Aeromonadaceae; Aeromonas.
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
source 1..188
/organism="Aeromonas lacus"
/db_xref="taxon:558884"
Protein 1..188
/product="peroxiredoxin"
/calculated_mol_wt=20484
Region 5..188
/region_name="AhpC"
/note="peroxiredoxin; TIGR03137"
/db_xref="CDD:211789"
Region 5..174
/region_name="PRX_Typ2cys"
/note="Peroxiredoxin (PRX) family, Typical 2-Cys PRX
subfamily; PRXs are thiol-specific antioxidant (TSA)
proteins, which confer a protective role in cells through
its peroxidase activity by reducing hydrogen peroxide,
peroxynitrite, and organic hydroperoxides; cd03015"
/db_xref="CDD:239313"
Site order(5,46..47,50,110,120,133..135,137..139,143..144,151,
167..170)
/site_type="other"
/note="dimer interface [polypeptide binding]"
/db_xref="CDD:239313"
Site order(44,78..79,101,103,115)
/site_type="other"
/note="decamer (pentamer of dimers) interface [polypeptide
binding]"
/db_xref="CDD:239313"
Site order(45,48,121)
/site_type="active"
/note="catalytic triad [active]"
/db_xref="CDD:239313"
Site order(48,167)
/site_type="active"
/note="peroxidatic and resolving cysteines [active]"
/db_xref="CDD:239313"

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