

Protein View: AAP70009.1

cytosolic malate dehydrogenase, partial [Triticum aestivum]

Database: NCBIprot
Score: 98
Expect: 0.00096
Monoisotopic mass (M_r): 24560
Calculated pI: 6.60
Taxonomy: [Triticum aestivum](#)

Sequence similarity is available as [an NCBI BLAST search of AAP70009.1 against nr](#).

Search parameters

Enzyme: Trypsin: cuts C-term side of KR unless next residue is P.
Fixed modifications: [Carbamidomethyl \(C\)](#)
Variable modifications: [Oxidation \(M\)](#)
Mass values searched: 11
Mass values matched: 6

Protein sequence coverage: 41%

Matched peptides shown in ***bold red***.

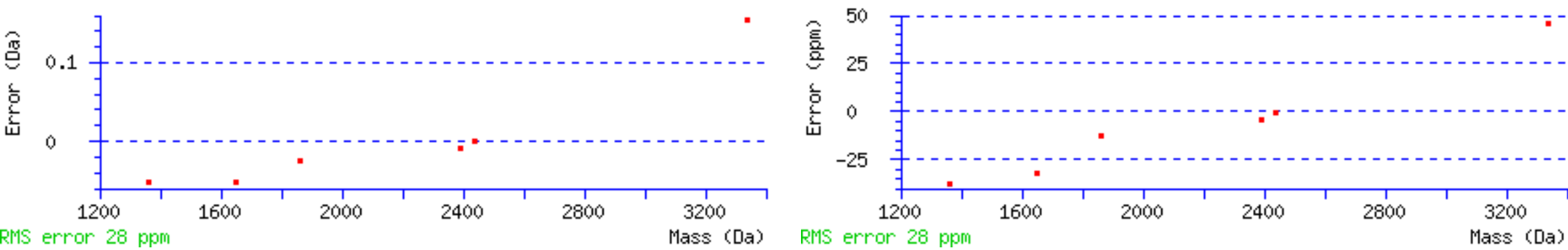
1 MLGADQPVIL HMLDIEFAAE ALKGVK**MELI DAAFPLLK**GV VATTDVVEAC
51 TGVNVAVMVG GFPRKEGMER KDVMTKNVS IYKAQASALEA HAAPNCK**VLV**
101 **VANPANTNAL ILKEFAPSIP EKNISCLTRL** DHNRALGQIS ERLGVQVSDV
151 **KNAIIWGNHS SSQYPDVNHA TVKTPSGEKP VRELVDDEW LNGEFIATVQ**
201 **QR**GAAIIKAR KLSSALSAAS SACDHIR

Unformatted sequence string: [227 residues](#) (for pasting into other applications).

Sort by ☒ residue number ☐ increasing mass ☐ decreasing mass
Show ☒ matched peptides only ☐ predicted peptides also

Start – End	Observed	Mr (expt)	Mr (calc)	Delta M	Peptide
27 – 38	1360.7031	1359.6958	1359.7472	-0.0514 0	K.MELIDAAFPLLK.G
98 – 113	1649.9419	1648.9346	1648.9876	-0.0530 0	K.VLVVANPANTNALILK.E
114 – 129	1861.9237	1860.9164	1860.9404	-0.0239 1	K.EFAPSIPEKNISCLTR.L
152 – 173	2438.1844	2437.1771	2437.1775	-0.0003 0	K.NAIIWGNHSSSQYPDVNHATVK.T
174 – 202	3341.8294	3340.8221	3340.6688	0.1533 1	K.TPSGEKPVRELVDDEWLNGEFIATVQQR.G
183 – 202	2390.1531	2389.1458	2389.1550	-0.0092 0	R.ELVDDEWLNGEFIATVQQR.G

No match to: 1350.6246, 1641.7904, 1905.9620, 2211.1040, 2373.1022



LOCUS	AAP70009	227 aa	linear	PLN 26-JUL-2016
DEFINITION	cytosolic malate dehydrogenase, partial [Triticum aestivum].			
ACCESSION	AAP70009			
VERSION	AAP70009.1			
DBSOURCE	accession AY236152.1			
KEYWORDS	.			
SOURCE	Triticum aestivum (bread wheat)			
ORGANISM	Triticum aestivum			
	Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; BOP clade; Pooideae; Triticodae; Triticeae; Triticinae; Triticum.			
REFERENCE	1 (residues 1 to 227)			
AUTHORS	Ma,Q.-H.			
TITLE	Characterization of a cytosolic malate dehydrogenase cDNA from wheat			
JOURNAL	Unpublished			
REFERENCE	2 (residues 1 to 227)			
AUTHORS	Ma,Q.-H. Sr.			
TITLE	Direct Submission			
JOURNAL	Submitted (13-FEB-2003) Key Laboratory of Photosynthesis and Environmental Molecular Physiology, Institute of Botany, Chinese Academy of Sciences, 20 Nanxin Cun, Xiangshan, Beijing 100093, China			
COMMENT	Method: conceptual translation supplied by author.			
FEATURES	Location/Qualifiers			
source	1..227			
	/organism="Triticum aestivum"			
	/cultivar="H4564"			
	/db_xref="taxon:4565"			
Protein	<1..>227			
	/product="cytosolic malate dehydrogenase"			
	/EC_number="1.1.1.37"			
Region	1..>227			
	/region_name="NADB_Rossmann"			
	/note="Rossmann-fold NAD(P)(+)-binding proteins; c121454"			
	/db_xref="CDD:304358"			
Site	order(14..15,59..60,80,101..103,127,130,159,218)			
	/site_type="other"			
	/note="NAD(P) binding site [chemical binding]"			
	/db_xref="CDD:133419"			
Site	order(21,25,27..28,30..32,133..134,136..137,143,220,224)			
	/site_type="other"			
	/note="LDH/MDH dimer interface [polypeptide binding]"			
	/db_xref="CDD:133419"			
Site	order(103,134,159)			
	/site_type="other"			
	/note="substrate binding site [chemical binding]"			
	/db_xref="CDD:133419"			
CDS	1..227			
	/coded_by="AY236152.1:<1..>683"			