

Protein View: AQT26482.1

alpha amylase/trypsin inhibitor, partial [Triticum aestivum]

Database:NCBIprot

Score:94

Expect:0.0021

Monoisotopic mass (M<sub>r</sub>):15430

Calculated pI:7.67

Taxonomy:[Triticum aestivum](#)

Sequence similarity is available as [an NCBI BLAST search of AQT26482.1 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:8

Mass values matched:5

Protein sequence coverage: 63%

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

1RTNLLPHCRD**YVLQQT**CGTF**TPGSKLPEWM****TSASIYSPGK****PYLAK**LYCCQ

51ELAEISQQCRCEALR**YFIAL****PVPSQPVDPR****SGNVGESGLI****DLPGCPR**QMQ

101WDFVR**LLVAP****GQCNLATIHN****VR**YCPAVEQP LWI

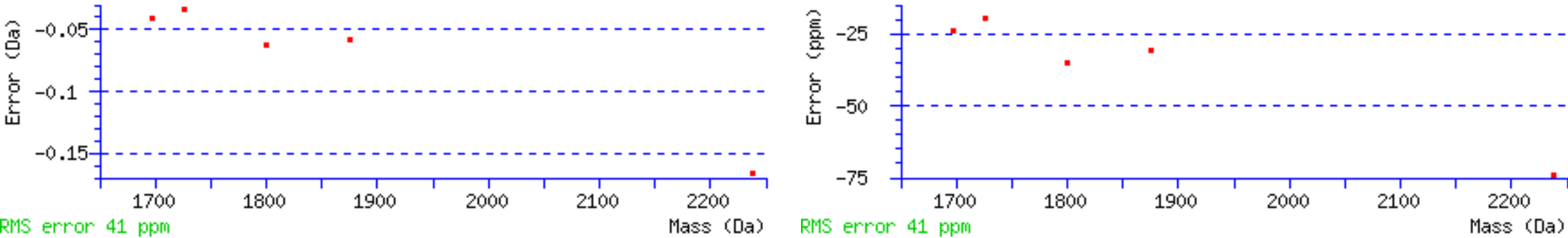
Unformatted sequence string: [133 residues](#) (for pasting into other applications).

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
10 – 25	1801.7797	1800.7724	1800.8353	-0.0628 0	<b>R.DYVLQQT</b> CGTF <b>TPGSK.L</b>
26 – 45	2238.9806	2237.9733	2238.1394	-0.1661 0	<b>K.LPEWMT</b> TSASIYSPGK <b>PYLAK.L</b>
66 – 80	1698.8806	1697.8733	1697.9141	-0.0408 0	<b>R.YFIALP</b> VPS <b>Q</b> PVDPR. <b>S</b>
81 – 97	1727.8040	1726.7968	1726.8308	-0.0341 0	<b>R.SGNVGE</b> SG <b>LID</b> LP <b>GCPR.Q</b>
106 – 122	1875.9639	1874.9567	1875.0149	-0.0582 0	<b>R.LLVAPG</b> QCN <b>LATIHNVR.Y</b>

No match to: 1765.7308, 1794.7927, 2211.1040



LOCUSAQT26482133 aa                   linear    PLN 04-MAR-2017

DEFINITIONalpha amylase/trypsin inhibitor, partial [Triticum aestivum].

ACCESSIONAQT26482

VERSIONAQT26482.1

DBSOURCEaccession KY274454.1

KEYWORDSDOT

SOURCE

ORGANISMTriticum aestivum

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; BOP clade; Pooideae; Triticodae; Triticeae; Triticinae; Triticum.

REFERENCE1 (residues 1 to 133)

AUTHORSKaushik,M., Sinha,S.K. and Mandal,P.K.

TITLECloning and sequence analysis of alpha amylase/trypsin inhibitor gene from bread wheat (Triticum aestivum)

JOURNALUnpublished

REFERENCE2 (residues 1 to 133)

AUTHORSKaushik,M., Sinha,S.K. and Mandal,P.K.

TITLEDirect Submission

JOURNALSubmitted (30-NOV-2016) NRCPB, ICAR-National Research Centre on Plant Biotechnology, Pusa Campus, New Delhi, Delhi 110012, India

FEATURES

source

1..133

/organism="Triticum aestivum"

/cultivar="HD2967"

/db\_xref="taxon:4565"

/tissue\_type="seed"

/country="India"

Protein

<1..>133

/product="alpha amylase/trypsin inhibitor"

Region

5..125

/region\_name="AAI\_SS"

/note="Alpha-Amylase Inhibitors (AAIs) and Seed Storage (SS) Protein subfamily; composed of cereal-type AAIs and SS proteins. They are mainly present in the seeds of a variety of plants. AAIs play an important role in the natural defenses of plants against...; cd00261"

/db\_xref="CDD:238163"

Site

order(45,104,108,114,123)

/site\_type="other"

/note="dimer interface [polypeptide binding]"

/db\_xref="CDD:238163"

CDS

1..133

/gene="ATI"

/coded\_by="KY274454.1:<1..>403"

/codon\_start=3