

MATRIX SCIENCE **MASCOT Search Results**

Protein View: AAR15494.1

pollen coat oleosin-glycine rich protein [Arabidopsis arenosa]

Database: NCBIprot
Score: 72
Expect: 0.38
Monoisotopic mass (M_r): 49589
Calculated pI: 10.25
Taxonomy: **Arabidopsis arenosa**

Sequence similarity is available as [an NCBI BLAST search of AAR15494.1 against nr.](#)

Search parameters

MS data file: SPOT_85.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: 44%

Matched peptides shown in **bold red**.

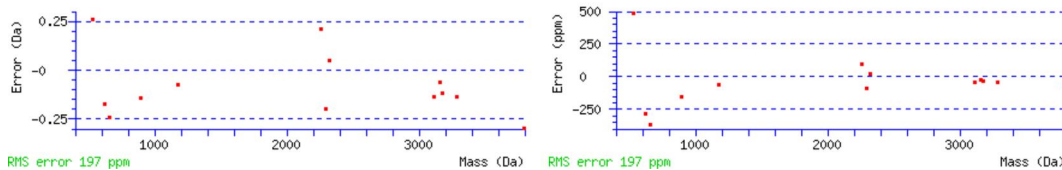
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1 MSELSONPS SAQSLSLREG RNRFPFLSLS QREGRFFPSL SLSEREGKKF
51 SFLSMFSLM PLLEVIKIII ASVASVVLG FACVTLAGSA VALAVSTPVF
101 IIFSPVLVPA TIATVTLTTG FTAGGSFGAT ALGLLWLK RRMGVKAKDN
151 PPPAGLPPNS GAEAGGAQSL IKKSLSKGLL KLPANCKML GKGFGGKGK
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301 GGGMSGSEG AMSGSEGMS GGSKSRGGK LGGLRGKYGK KGGKSGGGG
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451 LGSKFGGKGG GGGMSGGG MSGSEGGMSG SEGGMSEGM SGGGGKHKI
501 GGGKHLGGG KHGGGGHMA E
    
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Unformatted sequence string: **521 residues** (for pasting into other applications).

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

Query	Start - End	Observed	Mr (expt)	Mr (calc)	Delta	M	Score	Peptide
32	36 - 45	1182.5422	1181.5349	1181.6081	-0.0732	0		R.FFPSLSLSE .E
56	49 - 67	2293.0379	2292.0307	2292.2302	-0.1995	1		K.KFSFLSMFSLMPLLEVIK .I + Oxidation (M)
18	189 - 197	894.3450	893.3377	893.4793	-0.1416	1		K.MLGGKFGGK .K
1	194 - 198	536.5782	535.5709	535.3118	0.2591	1		K.FGGKK .G
7	209 - 215	662.1024	661.0952	661.3395	-0.2443	1		K.GGKSEK .E
54	252 - 277	2263.0677	2262.0605	2261.8471	0.2134	0		K.GMSGSESEEGMSGSEGGMSGGGGK .S
58	296 - 323	2320.9387	2319.9314	2319.8825	0.0489	0		K.GMSGGMSGMSGSEGAMSGSEGGMSGGK .S
84	342 - 387	3794.1022	3793.0949	3793.3922	-0.2973	1		K.GGKSGGGGMSGSEGGMSGSEGGMSGGGMSGGGGGK .H + 5 Oxidation (M)
5	394 - 400	625.1657	624.1584	624.3344	-0.1759	0		K.HGGLGK .F
69	404 - 440	3113.0590	3112.0517	3112.1897	-0.1380	1		K.KGGMSGGGGMSGSEGGMSGSEGGMSGGGMSGGGK .H + Oxidation (M)
81	458 - 497	3286.1049	3285.0976	3285.2334	-0.1358	1		K.KGGGGMSGGGGMSGSEGGMSGSEGGMSGGGGGK .H + 3 Oxidation (M)
78	459 - 497	3158.0813	3157.0741	3157.1384	-0.0644	0		K.GGGGMSGGGGMSGSEGGMSGSEGGMSGGGGGK .H + 3 Oxidation (M)
80	459 - 497	3174.0243	3173.0170	3173.1333	-0.1163	0		K.GGGGMSGGGGMSGSEGGMSGSEGGMSGGGGGK .H + 4 Oxidation (M)



LOCUS AAR15494 521 aa linear SYN 03-MAR-2004
 DEFINITION pollen coat oleosin-glycine rich protein [Arabidopsis arenosa].
 ACCESSION AAR15494
 VERSION AAR15494.1
 DBSOURCE accession AY350715.1
 KEYWORDS .
 SOURCE Arabidopsis arenosa
 ORGANISM Arabidopsis arenosa
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; eudicotyledons; Gunneridae;
 Pentapetalae; rosids; malvids; Brassicales; Brassicaceae;
 Camelinae; Arabidopsis.
 REFERENCE 1 (residues 1 to 521)
 AUTHORS Fiebig,A., Kimport,R. and Preuss,D.
 TITLE Comparisons of pollen coat genes across Brassicaceae species reveal rapid evolution by repeat expansion and diversification
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 101 (9), 3286-3291 (2004)
 PUBMED 14970339
 REFERENCE 2 (residues 1 to 521)
 AUTHORS Fiebig,A., Kimport,R. and Preuss,D.
 TITLE Direct Submission
 JOURNAL Submitted (24-JUL-2003) Molecular Genetics and Cell Biology, University of Chicago, Howard Hughes Medical Institute, 1103 E. 57th Street, Chicago, IL 60637, USA
 COMMENT Method: conceptual translation supplied by author.
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Mascot: <http://www.matrixscience.com/>