

Supplementary Material

Article

Multispecies identification of oilseed- and meat-specific proteins and heat-stable peptide markers in food products

Klaudia Kotecka-Majchrzak ¹, Natalia Kasałka-Czarna ¹, Agata Sumara ², Emilia Fornal ² and Magdalena Montowska ^{1,*}

¹ Department of Meat Technology, Poznan University of Life Sciences, Wojska Polskiego 31, Poznan 60-624, Poland; klaudia.kotecka@up.poznan.pl; magdalena.montowska@up.poznan.pl

² Department of Pathophysiology, Medical University of Lublin, Jaczewskiego 8b, Lublin 20-090, Poland; agatab9419@gmail.com; emilia.fornal@umlub.pl

* Correspondence: magdalena.montowska@up.poznan.pl; Tel.: +48 61 848 7257

Table S1. Peptides unique to oilseed proteins analysed in commercial food products (coconut, flaxseed, hemp seeds, milk thistle seeds, nigella seeds, pumpkin seeds, rapeseed, sesame seeds, sunflower seeds).

Protein	Parent Ion (m/z)	Exp z	Peptide Marker	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
coconut															
11S globulin isoform 2 (AKS26849.1)	991.5071	2	GFGTELLAAAFGIDMELAR		-							-		-	
	635.3315	2	AGSEGFQFVSIK		-							-		-	
	561.7771	2	GETVFDGELR		-							-		-	
	714.3377	3	GMVGLVMPGCPETFQSFQR		-							-		-	
	523.7641	4	GRVEVADDKGETVFDGELR		-							-		-	
cocosin (ASQ40963.1)	619.6739	3	QGQLLIVPQNFAMLER		-							-		-	
	681.9973	3	AENGLQVLRPSGMEEEER		-							-		-	
	432.2241	2	CAGVSTIR		-							-		-	
	1011.4302	2	SEAGVTDYFDEDNEQFR		-							-		-	
alpha galactosidase isoform 2 (AIL28756.1)	1051.9654	2	LGYYVNLDDCWAESNR		-							-		-	
	1112.5950	2	EILINEEAIAVNQDALGVQ GK		-							-		-	
	776.3615	2	LGIYGDAGFYTCSK		-							-		-	
	1289.1257	2	GSSQTSITANWSDIGLDPSTVVDAR		-							-		-	
	903.0668	3	TPQMGWNSWNHFACNIDEQMIK		-							-		-	
	581.6339	3	VKGDGSAEVWAGPLSGGR		-							-		-	
oleosin isoform 500a (AQT25673.1)	456.5737	3	RPPGSEQLEQAR		-							-		-	
oleosin isoform 300a (AQT25672.1)	487.5738	3	HHQALPAAAMEER		-							-		-	
Oleosin isoform OLE500c partial (ACH91013.1)	599.3204	2	VPGAEQLEQAR		-							-		-	
flaxseed															
hypothetical protein (AND01131.1) /	625.8470	2	DIPIFQYNIK	P1	-										
	569.2937	2	DQLAEALYSK		-										
tripeptidyl peptidase II (AFN53692.1)	873.4648	2	FIEVPLGASWAEATVR		-										
	668.3549	3	LSLLEEIGWTHLTAYEK		-										
	553.2980	2	SFNLVVDPSK		-										
	363.5376	3	TLEDKDVIR		-										

	678.3460	2	VYSVGDVYPAASK		-									
allene oxide synthase (P48417.1)	434.7484	2	AGLELHTK		-									
	635.3257	2	EVEEATLHSVR		-									
	488.9379	3	LPPLLVQNDYHR		-									
	826.4018	3	LYEFTSAAGSVLDEAEQSGISR		-									
conlinin (CAC94011.1)	658.3083	2	DLPGQCQTQPSR		+									
	646.9305	3	GGGQQSQHFDSCCDDLK		+									
	745.3280	2	GGQGGGQQQQQCEK		+									
	857.4147	2	QDIQQGQQQEVER		+									
	596.8029	2	QIQEQDYLR		+									
oleosin high molecular weight isoform (ABB01624.1)	808.3767	2	GGPYHQQTGSGPSASK		-									
	600.2646	2	MQDAAGYMGQK		+									
	862.0914	3	TTQPHQVQVHTQHHPYTGGAFFGR		-									
	722.0281	3	YLQQAGQGVGVGVPDSFDQAK		-									
conlinin (CAC94010.1)	983.3842	2	GGGEQSQYFDSCCDDLK		+									
	888.0736	3	GGGQGGGQQQSCEQQIQQDFLR		+									
	863.9276	2	QEIQQQGQQQEVQR		+									
	541.7418	2	QLSTGCTCR		+									
	622.2671	2	SCQQFMWEK		+									
chitinase IV, partial (ABA39179.1)	758.3822	2	ANGFDGVANPDIVAR		-									
	356.1756	3	SRYPCAQGK		-									
late embryogenesis abundant (lea) (AMY26620.1)	494.2600	2	AVAQEQVDK		-									
	844.0464	3	QGEQVTGGYGNYTTGGQTGYNHQI		-									
	442.2267	2	VSAHGPMGK		-									
chain A, Linum usitatissinum trypsin inhibitor (P82381.1)	507.2754	2	NAWPELVGK		-									
	553.7683	2	SGNMAAATVER		-									
	986.5374	2	VWVIVNDHGVVTSVPHIT		-									
amaranthin-like lectin (AIU47287.1)	636.3531	3	LQVVPSTIDPTSMIHLR		-									
	424.2331	3	SLEAHTVLSWK		-									
oleosin, partial (ABB01620.1)	795.8659	2	ASDFGQQHVVTGGQTS		-									
oleosin isoform (ABB01617.1)	838.3924	2	ASEFAQQHVVTGGQTS		-									
oleosin isoform (ABB01618.1)	831.3817	2	ASEFGQQHVVTGGQTS		+									

hemp seeds				P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	
edestin 1 (CDP79023.1)	597.0566	4	NAIYTPHWNVNAHSVMYVLR								+	+	+			
	822.3950	2	YLEEAFNVDSETVK								+	+	+			
	930.8344	3	YTIQQNGLHLPSTNTPQLVYIVK								+	-	+			
	749.6201	4	VEAEAGLIESWNPNNHQFCAGVAVVR								+	+	+			
	708.6764	3	GILGVTFFGCPETFEEESQR								+	+	+			
	715.3259	2	GQGQGSQGSQPDR								+	+	+			
	745.4229	2	ISTVNSYNLPILR								+	+	+			
	744.3454	2	QASSDGFVVSFK								+	+	+			
	380.5400	3	VQVVNHMGQK									-	+	+		
	705.3615	2	EETVLLTSSTSSR								+	+	+			
	473.2245	2	LQGQNDDR								+	+	-			
	535.8186	2	GTLDLVSPLR								+	+	+			
	397.1866	3	QQNQCQIDR								+	+	+			
edestin 2 (CDP79028.1)	562.9650	3	ILAESFNVDTELAHK								+	+	+			
	824.4140	2	AMPDDVLANAFQISR								+	+	+			
	763.7034	3	NGMMAPHFNLDSHSVIYVTR								+	+	+			
	756.4102	3	GLLLPSFLNAPMMFYVIQGR								+	+	+			
	653.8455	2	ASAQGFEWIAVK								+	+	+			
	434.8582	3	SEGASSDEQHQK								+	+	+			
	779.4463	2	LNTLNYYNLPILR								+	+	+			
	527.5920	3	DEISVFSPSSQQTR								+	+	+			
	634.2869	2	WQSQCQFQR								+	+	+			
	508.2638	2	LQVDDNGR								+	+	+			
400.2213	3	GEDLQIAPSR								+	+	+				
edestin 3 (SNQ45160.1)	783.6132	4	VECEGGMIESWNPNEHQFCAGVALLR								+	+	+			
	593.2834	3	FYIAGNPHEDFPQSR								+	+	+			
	847.4157	2	AMPEDVIANSYQISR								+	+	+			
	1049.0167	2	GFSVNLIQEAFNVDSETAR								+	+	+			
	894.5037	3	LTIQPNGLHLPSTNTPQLIHVIR								+	+	+			
	834.3774	2	TAVYGDQNECQLNR								+	+	+			
	846.7509	3	GVLGTLFPGCAETFEEAQVSVGGGR								+	+	+			
	440.8728	3	SRQEQEQEMR									-	+	+		
	583.7990	4	NAMYAPHYNINAHSIYAIR								+	-	+			
	376.1713	3	LEACEPDHR								+	-	+			

	754.3585	3	FSTLETTLTQSSGPMGYGMPR	-	-	-	-	-	-				
jacalin-related lectin 36-like (XP_013672510.1)	929.1074	3	TLLGSEVFVDPDDYITSAEVQSDR	-	-	-	-	-	-				
	885.4617	2	IFGQDQDVTCLIFK	-	-	-	-	-	-				
	711.3682	2	TTGNEDAIAALAFK	-	-	-	-	-	-				
	746.6984	3	AGEVLHALGAYFSPSSSTSSGGR	-	-	-	-	-	-				
	597.3249	2	VQVTYEDVIK	-	-	-	-	-	-				
	1116.5400	4	DNQIAGFQGISSNVLNSIDVHFAPLPSSSTS DSSTPSSASQANK	-	-	-	-	-	-				
	662.8210	2	TSSSTQTAGSAAGAK	-	-	-	-	-	-				
424.2241	3	TQNQFSIHAPK	-	-	-	-	-	-					
embryonic protein DC-8-like isoform X1 (XP_013687874.1)	788.8919	2	AGTVGWTAAHFTEK	-	-	-	-	-	-				
	792.0809	3	YAQQEQGAGAGGVLGAIGETIAEIAK	-	-	-	-	-	-				
	392.2013	3	GAAHYTGVAEEK	-	-	-	-	-	-				
	706.8731	2	TTTNIVIGDPPER	-	-	-	-	-	-				
	427.2050	3	MTSHFESIAEK	-	-	-	-	-	-				
	539.7549	2	GGSVQDTASEK	-	-	-	-	-	-				
	481.7617	2	EQTVSVTAK	-	-	-	-	-	-				
	575.2996	2	ATLEDIQGFR	-	-	-	-	-	-				
myrosinase (AAV80206.1)	532.2624	2	GYAVGTDAPGR	-	-	-	-	-	-				
	675.8510	2	GEFLGPLFVEDK	-	-	-	-	-	-				
	450.8870	3	GVNQGGLDYYHK	-	-	-	-	-	-				
nudix hydrolase 3 (RID54770.1)	1039.5188	2	YSPVTLEANLAELSEADQK	-	-	-	-	-					
oleosin S2-2-like (XP_013677557.1)	859.8713	2	VGYGAGYDYGADYK	-	-	-	-	-	-				
	784.8692	2	AHEAHDTSLTETR	-	-	-	-	-	-				
17.6 kDa class II heat shock protein-like (RID42282.1)	785.7318	3	FPIISILEDMLVPEEHSEK	-	-	-	-	-	-				
napin-3: 1.7S seed storage protein (P80208.1)	927.4855	2	QQQGQQGQQLQQVISR	-	-	-	-	-	-				
major oleosin NAP-II (RID78718.1)	579.9246	3	AQYYGQQQTGGEHDR	-	-	-	-	-	-				
	414.1971	3	DRDQYSMIGR	-	-	-	-	-	-				
	523.7233	2	DQYNMYGR	-	-	-	-	-	-				
peroxidase 12	720.8657	4	NLDITDLVALSGGHTIGIAHCPSFTDR	-	-	-	-	-	-				

(XP_009105826.1)															
napin small chain S2 (pir S70337)	537.2426	2	QAMQPGGGSGPS	-		-		-		-		-			
sesame seeds				P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
legumin B-like (XP_020549903.1)	952.0771	3	GMYGVMISGCPETFESSQQQFEGR				-								
	769.5992	4	IQAEGGVSEFWDHNSDEFQCAGVSIHR				+								
	691.9869	3	GESDMQIVNHNGQAVFDGR				+								
	704.0222	3	GFDVQILSEVFGVDEQTAR				+								
	932.4297	3	AGEQGCEWVEFNTNDNALINTLSGR				-								
	742.7351	3	ALMLPAYHNAPILAYVQQGR				+								
	764.7719	3	FSTINSLTLPILSFLQLSAAR				+								
	775.7190	3	NGIMAPHWCVNAHSVIVVTR				-								
	752.3649	2	GQEQQEYAPQLGR				+								
	524.2414	2	SLQGENDER				-								
	794.4355	2	GLPADVIANAYQISR				+								
	397.2029	3	GQHQFGNVFR				+								
	604.2730	2	GSTWQQGQCR				-								
11S globulin seed storage protein 2 precursor (NP_001291336.1)	805.7626	3	AMPLQVITNSYQISPNQAQALK				+								
	717.3644	3	AFDAELLSEAFNVPQETIR				+								
	927.7903	3	GNLYSNALVSPDWSMTGHTIVYVTR				+								
	769.3669	2	QEQFQCAGIVAMR				+								
	689.6622	3	GDAQVQVVDHNGQALMNDR				+								
	497.9773	4	MTFVRPDEEEGEQEHR				+								
	354.8553	3	QTFHNIFR				+								
	502.2730	4	STIRPNGLSLPNYHPSPR				-								
	670.3274	2	AGNNGFEWVAFK				+								
legumin B-like precursor (NP_001291327.1)	738.0355	3	NGITAPHWSTNSHSALYVTR				-								
	811.8886	2	AMPDEVVMNAFGVSR				+								
	1049.4783	3	LQSEAGVTEFWDANNEEFQCAGIEFVR				-								
	1034.0010	2	FFLAGNPQTAQFQGGQQR				+								
	667.3341	2	TECQVQQLTAR				-								
	777.3863	3	EGVTHWAYNDGDTPIISVSIR				+								
	702.3340	2	AGEQGFYVTFR				+								
	880.1456	3	SVLNNEEVNEGQLVVPQNFALAIR				+								
	410.4540	4	YWQSLQQHQQHR				+								

	720.7065	3	MTLQHNSLFLPSFQPFPR		-	+	-	+	+		+		-		
11S globulin seed storage protein G3-like (OTG20713.1)	973.4912	2	VQIVNNQGNVDFNLR		-	+	+	+	+		+		-		
	518.2806	3	FPILEHLQLSAER		-	+	+	+	+		+		-		
	660.9787	3	ENIDNPSHADFNVPQAGR		-	-	-	+	+		+		-		
	528.5540	4	GHIVNVGQDLQIRPPQAR		-	+	+	+	+		+		-		
	619.6456	3	FFLAGNPQAQSQQHR		-	+	+	+	+		+		-		
	1059.8220	3	GIQGVILSGCPETYEQSQFSGQSER		-	+	+	-	+		+		-		
	627.3320	2	ETVLFAPFSR		-	+	+	+	+		+		-		
seed biotin-containing protein SBP65-like (XP_022022103.1)	636.6244	3	VEETMYGTAGGGIHDQSR		-	-	-	+	-		-		-		
	819.8936	2	NIAMETGQAAEFAGK		-	-	-	+	-		-		-		
	601.3265	2	ALGVAETAVDAGK		-	-	-	+	+		-		-		
	820.3820	2	AAESAAEFASDTSAGVR		-	-	-	-	-		-		-		
	630.9920	3	AAGVATDAAVTGTNIAMATGK		-	-	-	+	-		-		-		
	693.3553	3	TAAELATGAAVTGTNIAMETGK		-	-	-	+	-		-		-		
11S seed storage protein globulin subunit beta-like (OTG06044.1)	924.7816	3	FFLAGNPQSQQGEPWQSQRPR		-	-	-	+	+		+		-		
	702.7277	3	GLLPYYPNTPELVYVVR		-	+	-	+	+		+		-		
	854.9328	2	ALPEEVLMSYSISR		-	-	-	+	+		+		-		
	525.2605	4	TGQSQRPGWETGRPEQQR		-	-	-	+	+		+		-		
	786.4138	2	ANIASPAIADVYNPR		-	+	-	+	+		+		-		
	615.2728	3	EEQEWEQYHPGQQR		-	-	-	+	+		+		-		
	696.8315	2	TNDNAMTTQLAGR		-	-	-	+	+		+		-		
	592.0920	5	SGQTQRPSWETGRPGQSQRPSWETGR		-	-	-	+	-		-		-		
	744.9083	2	LPVLESFQLSAER		-	+	-	+	+		+		-		
	1026.2117	3	EGDILALPAGAVHWTYNEGDTPLVVVALR		-	+	-	+	+		+		-		
		793.7142	3	GQGLQGTVLPGCVETFETSEGR		-	-	-	+	+		+		-	
	762.3873	4	NDGSQVFDWVQEGQLIVVPQDFAVIK		-	-	-	+	+		+		-		
seed storage albumin 2 precursor (ALO17641.1)/hypothetical protein HannXRQ_Chr11g0337791 (OTG08095.1)	654.8052	2	GQFGGQEMDIAR		+	+	+	+	+		+		-		
	756.9030	2	AQILPNVCNLQSR		+	+	+	+	+		+		-		
	741.0084	3	SQQCSETEIQRVPSQCQR		+	+	+	+	+		+		-		
	493.5518	3	ECQCEAVQEVAR		+	+	+	+	+		+		-		
	504.2586	2	MFLQQGQR		+	+	+	+	+		-		-		
	815.7251	3	VIQNLPNQCDLEVQQCNIPY		-	+	-	+	+		+		-		
	1035.9670	4	GQQHQQQQEQLLQCCQELQNIDQQCQCEAVK		-	+	-	+	+		-		-		

	885.4207	2	YVEQQMQSPMPYIR		-	-	-	+	-		-	-		
	754.0147	3	QQEQQLQCCNELQNVR		-	-	-	+	+		-	-		
	609.7864	2	QCSQQVQGQR		-	-	+	+	+		+	-		
protein disulfide- isomerase-like (OTF94178.1)	935.8423		FIVDSSIPLVTLFDQSPTNQPFLVK		-	-	-	+	-		-	-		
	787.4077	3	LAPILDEVAVSFENDADVMIK		-	-	-	-	-		-	-		
	630.8015	3	TPEDAGSLIDDK		-	-	-	-	-		-	-		
	567.2946	2	GESSVTTPTVR		-	-	-	+	-		-	-		
embryonic protein DC-8- like (XP_022038548.1)	667.3469	2	ISEGLGLSTEEAK		-	-	-	-	-		-	-		
	563.2754	2	DAATSAAEYVK		-	-	-	-	-		-	-		
aconitate hydratase cytoplasmic (OTG31512.1)	878.7623	3	DVWPSTEEIAEVVQSSVLPDMFR		-	-	-	-	-		-	-		
	735.3841	2	VVSFSFGGQTAELK		-	-	-	-	-		-	-		
malate synthase glyoxysomal (OTG26019.1)	913.9604	2	EDAANITEEDLLQIPR		-	-	-	-	-		-	-		
embryonic protein DC-8- like (OTG01250.1)	846.4545	3	APLGTGVVAAVDVEDTPLGTTGEVLR		-	-	-	-	-		-	-		
	683.1170	4	VTTEETRPGIISFNTVTGTLGHAK		-	-	-	-	-		-	-		
	643.2995	2	DATVNTTSEYVK		-	-	-	-	-		-	-		
late embryogenesis abundant protein Dc3- like (OTG27147.1)	575.2833	2	TGGIMQQTGEK		+	+	-	+	+		-	-		
	700.8139	2	ESADQTGSYVSEK		-	-	-	+	+		-	-		
	483.2324	2	TGQMMGNVK		-	-	-	-	-		-	-		
isocitrate lyase (OTG28376.1)	844.9412	2	TDAVGATLIQTNIDTR		-	-	-	-	-		-	-		
	1027.4912	2	TFSDAVVDAIGAMNVSEAEK		-	-	-	-	-		-	-		
glutathione peroxidase, partial (ABG35966.1)	884.9393	2	EGEPVVIAPSVSNDEAR		-	-	-	+	-		-	-		
	522.7583	2	DASGQNLPSR		-	-	-	+	+		-	-		
jacalin-related lectin 34- like (XP_022000240.1)	593.0370	4	GTGTGTFGTGGHEGLGTNIGHVEGR		+	+	-	+	+		+	-		
	629.0341	4	HEEHETFVQSDTGGQYQHEVR		-	-	-	-	-		-	-		
	810.8574	2	GHVDSGTGMEYTPGGR		-	-	-	-	-		-	-		
	792.8583	2	TGGIMGEYGSTGQGNR		-	-	-	+	-		-	-		
	897.7539	3	SIGQTGSQGLGTEPGSHGGIMGDYGATR		-	-	-	+	-		-	-		
	422.8753	3	QTDEHGNPIQK		-	-	-	+	-		-	-		
cold shock protein CS66- like (XP_022012178.1)	684.6445	3	DVYGGTGIGTGGHGHGDTHEK		-	-	-	-	-		-	-		
	625.3018	4	STGQTGYQLGTDAGHHQQLGQATR		-	-	-	+	+		-	-		
	588.6166	3	IHGTGGTGTDYNTSGGR		-	+	-	+	+		-	-		
	588.7863	2	QVDEYGNPVR		-	-	-	-	-		-	-		

	814.3823	2	TGTGSYGTGQDQGLGTK		-	-	-	-	-	-	-	-	
	1047.4715	2	LPGGHSTDEQTTTTGYGDTR		-	-	-	-	-	-	-	-	
peroxygenase-like (XP_022040985.1)	843.0526	3	VMAMADGNALTPEADCQPLTHER		-	-	-	+	-	-	-	-	
	655.3340	2	VAFDPFGWTAAK		-	-	-	+	+	-	-	-	
late embryogenesis abundant protein D-34- like (OTG22301.1; XP_021969614.1)	836.9370	2	LGDVLTDASSLPEDK		-	-	-	+	+	-	-	-	
	545.2770	2	MEVMPGGVAAK		-	-	-	+	+	-	-	-	
	818.0596	3	AITPEDAATMQSAENMVLGHTHK		-	-	-	-	-	-	-	-	
	763.8787	2	YGDVVFQVSGELANK		-	-	-	-	-	-	-	-	
	1032.4861	2	NQPEMATYPPGGVAASMAAAAR		-	-	-	-	-	-	-	-	
chaperone protein ClpB1-like (OTG16327.1)	593.2971	2	GDVPPNLSDVR		-	-	-	-	-	-	-	-	
putative aspartic proteinase A1 (OTG31235.1)/ cyprosin- like (XP_022028305.1)	742.3492	3	HAGEEEGGELVFGGVDPNHFK		-	-	-	+	-	-	-	-	
	841.4453	2	FDGILGLGYQDISVGK		-	-	-	+	+	-	-	-	
	979.1399	3	IPSPMGESAVDCQTLNMPNIAFTIGGK		-	-	-	+	-	-	-	-	
putative epoxide hydrolase (OTF98057.1)	595.3464	2	INDIVLDFIK		-	-	-	+	-	-	-	-	
	958.8392	3	NDVPLLQQIVVLEGAGHFLSQENPEK		-	-	-	+	-	-	-	-	
	798.3846	3	FQEPGVMEAEIESYGTTEHVLR		-	-	-	+	-	-	-	-	
vicilin-like seed storage protein At2g18540 (OTG22315.1 XP_021969 630.1)	988.0245	2	VLQSTFSVPEEVIEELR		-	-	-	+	-	-	-	-	
	663.6701	3	GGENQPLIVDGCQFEISASK		-	-	-	+	-	-	-	-	
	718.2871	2	GGCGGGWQEEEGGR		-	-	-	-	-	-	-	-	
	560.5978	3	WPLMSSECGEVSAVK		-	-	-	-	-	-	-	-	
oleosin 16.4 kDa-like (OTF98883.1 XP_022005 568.1)	600.9731	3	AHDIGPEGAVHAGSAVGGAK		-	+	+	+	+	+	+	-	
	431.8961	3	LQDLVEYTGQK		-	+	+	+	+	+	+	-	
	491.5927	3	QITGTVPEQVDSAK		-	+	+	+	+	+	+	-	
	427.9725	4	HPQQVQVHTVHDQR		-	-	+	+	+	-	-	-	
11-beta-hydroxysteroid dehydrogenase-like 5 (OTG27680.1 XP_022034 099.1)	739.3640	2	EVQASGSPVEEFAK		-	-	-	-	-	-	-	-	
11S globulin seed storage protein G3-like (XP_021988017.1)	973.9836	2	VQIVDNQGNVFDNELR		-	+	+	+	+	+	+	-	
putative 11-S seed storage protein	388.1664	3	GMDSSADSHQK		-	-	-	+	+	+	+	-	
	885.4558	3	NQEVVAIIVDDVNNPANQLDFQAK		-	+	+	+	+	+	+	-	

(OTG28570.1)	610.8044	2	SPFGGQEELTR		+	+	+	+	+		+		-		
2S seed storage albumin 1 (XP_021993221.1)	655.7945	2	GQFGGQEMETAR		+	+	+	+	+		+		-		
vicilin-like seed storage protein At2g28490 (XP_022001204.1)	1050.9530	2	NDYGWSVEVDGDDYEPLK		-	-	-	+	-		-		-		
oleosin, partial (CAA44224.1)	669.3211	2	GTLQDAGEYAGQK		-	+	+	+	+		+		-		
	747.3840	2	QTAGSVPESLDYVK		-	-	+	+	+		+		-		
oleosin (CAA55348.1)	684.3465	2	HHVTTTQPQYR		-	-	-	+	+		+		-		
	619.3081	2	LQDVGEYTGQK		-	+	+	+	+		+		-		