

Supplementary data for article:

Smiljanic, K.; Apostolovic, D.; Trifunovic, S.; Ognjenovic, J.; Perusko, M.; Mihajlovic, L.; Burazer, L.; van Hage, M.; Cirkovic Velickovic, T. Subpollen Particles Are Rich Carriers of Major Short Ragweed Allergens and NADH Dehydrogenases: Quantitative Proteomic and Allergomic Study. *Clinical and Experimental Allergy* **2017**, *47* (6), 815–828.

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Table S3. Complete list of identified protein groups in "in sc

This table supports

Green labelled

Unique protein entries to APE fraction	Protein Group	Protein ID	Accession
Q0PUV7	69	1482	Q0PUV7_STERE
Q2KN26	28	390	O65352
J7KE88	23	16	G5EN35_9ASTR
A0A0A0QVW1	118	203	V9VA11_9ASTR
A5JRL1	49	175	D4NYE5_TRAPR
K9MJH9	241	15777	Q2KN26_AMBAR
A0A076EA72	58	1159	Q69AB6_HELAN
Q6T8D1	22	34	V5LU01_AMBAR
Q3LVP4	72	215	Q38678_AMBAR
	73	8297	Q9MB08_HELAN
	21	266	Q6S4N3_HELAN
	66	49	A0A0M4JA76_CICIN
	60	40	A0A0P0A367_LACSA
	34	85	A0A0A1HAD2_CHRM
	139	5297	J7KE88_LACSA
	48	2193	Q2I6J6_STERE
	30	8142	V5P1B9_CIRAR
	63	16015	A0A0A0QVW1_9AST
	124	11095	A5JRL1_9ASTR
	1	100	O04004
	85	3940	K9MJH9_SENVU
	86	160	P47919
	31	15962	A0A076EA72_9ASTR
	14	3	E1XUL9_AMBAR
	8	11	P27760
	20	13	P27762
	5	1	P27759
	7	2	E1XUL2_AMBAR
	6	10	E1XUL3_AMBAR
	11	4	E1XUL4_AMBAR
	26	32	A8CYN7_GERHY
	51	59	A1Y2J9_HELAN
	56	65	I6LNT9_HELAN
	43	103	Q2KM81_ARTVU
	13	117	P00304
	3	207	P02878
	9	373	P43174
	12	43	Q2KN24_AMBAR

15	45	Q2KN23_AMBAR
19	74	Q64LH0
17	164	A5HSG4_ARTAN
74	7517	W8P1H2_9ASTR
479	396	Q6T8D1_HELAN
10	214	D4IIH6_AMBAR
16	283	D4IIH1_AMBAR
240	244	Q6A199_HELAN
176	1144	Q41724_ZINVI
64	210	Q3LVQ4_TAROF
232	15963	Q3LVP4_TAROF
33	44	P48493
154	689	Q41186_LACSA
2	66	P69313

52 protein groups

18 allergen isoforms

"solution trypsin-digested" short ragweed aqueous pollen protein extract (APE) after proteomic shotgun analysis by PEAKS DB software.

results presented in the Figure 1. of the manuscript

cells denotes officially recognized allergen isoforms

Description	-10lgP	Coverage (%)	#Peptides	#Unique
(E)-4-hydroxy-3-methylbut-2-enyl diphosphate synthase OS	34.72	1	1	1
14-3-3-like protein OS=Helianthus annuus PE=2 SV=1	108.4	17	6	6
Actin OS=Chrysanthemum seticuspe f. boreale GN=CsActin	115.31	14	5	1
Alcohol dehydrogenase 1A (Fragment) OS=Podospermum j.	43.63	6	1	1
Ascorbate peroxidase 2-like protein (Fragment) OS=Tragop	102.48	38	3	3
Calcium-binding protein isoallergen 2 OS=Ambrosia artemis	31.74	12	2	1
CC-NBS-LRR-like protein (Fragment) OS=Helianthus annuus	34.16	2	2	1
Cysteine protease OS=Ambrosia artemisiifolia PE=2 SV=1	155.84	28	9	9
Cysteine proteinase inhibitor OS=Ambrosia artemisiifolia P	79.22	14	1	1
Cysteine proteinase inhibitor OS=Helianthus annuus GN=sn	56.31	6	2	2
Cytochrome c OS=Helianthus annuus PE=2 SV=1	110.68	40	4	4
Elongation factor 1-alpha OS=Cichorium intybus GN=EF1alp	54.27	2	1	1
Glyceraldehyde 3-phosphate dehydrogenase (Fragment) O	69.03	18	3	2
Heat shock protein 70 OS=Chrysanthemum morifolium GN	130.34	14	7	6
Heat shock protein 90 OS=Lactuca sativa GN=Hsp90 PE=2 S	63.29	2	1	1
Malate dehydrogenase (Fragment) OS=Stevia rebaudiana P	46.55	11	2	2
Maturase K (Fragment) OS=Cirsium arvense GN=matK PE=4	31.71	2	1	1
Mitogen-activated protein kinase kinase kinase 1 plant (Fr	25.01	1	1	1
NBS-LRR resistance-like protein RGC569 (Fragment) OS=He	38.21	6	1	1
Non-specific lipid-transfer protein OS=Ambrosia artemisiifo	246.42	72	33	33
NtPRp27-like (Fragment) OS=Senecio vulgaris PE=4 SV=1	65.18	5	2	2
Nucleoside diphosphate kinase A OS=Flaveria bidentis PE=2	84.06	20	2	2
PawS-like prealbumin 1 OS=Espeletia schultzei GN=PawL	31.16	3	1	1
Pectate lyase (Fragment) OS=Ambrosia artemisiifolia GN=al	232.35	55	22	13
Pectate lyase 1 OS=Ambrosia artemisiifolia PE=1 SV=1	271.27	70	37	1
Pectate lyase 4 OS=Ambrosia artemisiifolia PE=1 SV=1	189.37	41	11	11
Pectate lyase 5 OS=Ambrosia artemisiifolia PE=1 SV=1	279.35	81	38	1
Pectate lyase OS=Ambrosia artemisiifolia GN=amba1 PE=2	276.03	81	37	2
Pectate lyase OS=Ambrosia artemisiifolia GN=amba1.2 PE=	274.01	70	38	2
Pectate lyase OS=Ambrosia artemisiifolia GN=amba1.3 PE=	263.64	66	32	27
Peptidyl-prolyl cis-trans isomerase OS=Gerbera hybrida PE=	166.14	60	10	2
Phosphoglycerate kinase OS=Helianthus annuus GN=PGK1	123.14	13	5	4
Phosphoglycerate kinase OS=Helianthus annuus GN=PGK2	105.2	18	6	5
Polcalcin OS=Artemisia vulgaris PE=2 SV=1	126.89	35	4	4
Pollen allergen Amb a 3 OS=Ambrosia artemisiifolia var. ela	158.47	52	12	12
Pollen allergen Amb a 5 OS=Ambrosia artemisiifolia var. ela	212.74	93	21	11
Pollen allergen Amb p 5a OS=Ambrosia psilostachya PE=1 S	188.02	55	13	3
Profilin OS=Ambrosia artemisiifolia PE=2 SV=1	212.98	79	16	8

Profilin OS=Ambrosia artemisiifolia PE=2 SV=1	196.82	74	14	6
Profilin-3 OS=Ambrosia artemisiifolia GN=D03 PE=1 SV=1	183.48	61	12	7
Putative calmodulin OS=Artemisia annua PE=2 SV=1	211.16	72	16	16
Putative cell wall xyloglucan endotransglucosylase/hydrolase	47.37	6	1	1
Putative luminal binding protein (Fragment) OS=Helianthus	43.61	5	1	1
Ragweed homologue of Art v 1 OS=Ambrosia artemisiifolia	173.88	34	12	8
Ragweed homologue of Art v 1 (Fragment) OS=Ambrosia ar	130.23	22	7	3
Superoxide dismutase [Cu-Zn] OS=Helianthus annuus GN=s	41.47	7	1	1
TED2 OS=Zinnia violacea PE=2 SV=1	41.47	3	1	1
TO23-1 (Fragment) OS=Taraxacum officinale GN=To23-1 PE	87.91	60	4	3
TO38-23 (Fragment) OS=Taraxacum officinale GN=To38-23	35.86	5	1	1
Triosephosphate isomerase cytosolic (Fragment) OS=Lactu	138.48	50	6	6
Triosephosphate isomerase (Fragment) OS=Lactuca sativa f	51.92	27	1	1
Ubiquitin OS=Helianthus annuus PE=3 SV=2	130.24	69	9	9

Avg. Mass	PTM
82152	
28947	
41625	Carbamidomethylation; Deamidation (NQ); Oxidation (M)
18689	Carbamidomethylation
13225	
9294	
77365	Deamidation (NQ)
43157	Carbamidomethylation
10524	
31827	Deamidation (NQ)
12113	Deamidation (NQ)
49404	
19485	
70896	
79808	
19812	
38829	
50554	Deamidation (NQ)
19379	
12789	Carbamidomethylation; Deamidation (NQ)
23005	
16136	
17354	
42311	Carbamidomethylation
43665	Carbamidomethylation
44082	Carbamidomethylation
42709	Carbamidomethylation
42695	Carbamidomethylation
43637	Carbamidomethylation; Deamidation (NQ)
42913	Carbamidomethylation; Deamidation (NQ)
18129	Carbamidomethylation
42303	
42408	Carbamidomethylation; Deamidation (NQ)
16694	
11375	
4979	Carbamidomethylation; Deamidation (NQ)
8710	Carbamidomethylation; Deamidation (NQ)
14245	Carbamidomethylation; Oxidation (M)

14100 Carbamidomethylation; Oxidation (M)
14277 Carbamidomethylation; Oxidation (M)
16848 Carbamidomethylation; Deamidation (NQ)
20018
19650
11896 Carbamidomethylation
13260 Carbamidomethylation
15425 Carbamidomethylation
34971
10531
15907
20540 Carbamidomethylation
4742 Carbamidomethylation
8672