

Appendix A The primers used in this study

Name	Forward (5'-3')	Reverse (5'-3')
<i>Pbr032240.1</i>	CTTCTCCCAGTGGTGGTGAC	TTAGATCCAGGCTCGGTGGT
<i>Pbr023217.1</i>	AACGCCGTTGGATCTCTGG	AGGAAAAAGAGGGTCTCTCTCGG
<i>Pbr003847.1</i>	GGTACTCATTCCATCCCCGC	GGCAAACAACGTTGAGGGAT
<i>Pbr032242.1</i>	TTCGGAATCGCCGAAGAAGG	GGATGAGGACTTGCTGTCCG
<i>Pbr040022.1</i>	GGAGACCACCACTGAAGCAC	CGGCTTGATCAACCACTTCG
<i>Pbr027542.1</i>	GGCGGCTCCACACCATTG	TCTCCAAGGAGCATCGGTTCC
<i>Pbr016230.1</i>	TGGGATGATATTGTAGCCGGAC	GCATCGTCAACTTGCTCGAC
<i>Pbr000552.2</i>	CCTAACCGATGCCGAAGTGT	ACATTCTCGCCAACCCAGTT
<i>Pbr000392.1</i>	CCCTTGAATATCAAAGTGGAGGGA	CTGTGGCTTGTCGAAAACCTG
<i>Pbr010124.2</i>	CCACCTCCAGCAGCTAAGTC	TTGGTGCAGGTGCGAGTATT
<i>Pbr021263.1</i>	TCGGCAAGCTCAAAGACGAA	TGTCCAACCTGCCTTGACCA
<i>Pbr018948.1</i>	TACAAAGCTGCAACCCCGAG	GTGGCTACAGTTCCCGTGAT
<i>Pbr042667.1</i>	GAGGGATCTCCAGCAAAGCCG	CGACTGAAGGGCACAAAGCATG
<i>Pbr029276.1</i>	AAAGGCATCATCCGTCCTCG	GAGGGGTAGATGGATGCGG
<i>Pbr041476.1</i>	GGCCATTGTCTGAAGCAATCCAT	GACTCCGAATGAGGCTGACGTG
<i>Pbr025277.1</i>	ACCCTAATCAGTCCCGCACCC	CCGGGTCTGGTACGATGC
<i>Pbr032370.1</i>	TGCAACTCCTGGACCAACAA	TTTTTCCCGCGTTTAGGTGC
<i>Pbr021053.1</i>	ATCCACTGCTGCCACGC	AGGATGATGATGCGTCCAGAGG
<i>Pbr008237.1</i>	TTGCTGTTTGCATGTCCGC	CCGACCAGAGATCCAACGG
<i>Pbr033446.1</i>	CTACTTACAACGCCGCTTGC	TCATCGTTCCGGCGACATAG
<i>Pbr039425.1</i>	CCCAACCAGATTTCTGTGCTACC	GTCAGAGACGGCCCTGTCT
<i>Pbr029976.1</i>	CCAGATGAGCCTGCTTCCAA	GAAGTTTCCGGTGTTCTGGC

<i>Pbr020882.1</i>	TTTTGGTGGCGATCGGATGA	TTTTGGTGGCGATCGGATGA
<i>Pbr007577.1</i>	GCAGGCCTCGATCAAATCCA	CAGCGGGCTCACCGATTAT
<i>Pbr012520.1</i>	CATCACCTTCCAGCTCGTCA	GAAACATCGTTAGCGGGGCT
<i>Pbr028004.1</i>	CCCGAAGCGATACAGTGGTT	TCTTTGTAACCCGAGGCGAC
<i>Pbr038330.1</i>	TGCAGGTGTGGGATGTGGTC	CATGAGTGAGTGAGCATGAGGAAT
<i>Pbr004166.1</i>	GGCTCCCGCTCCTGCTAAC	AACAGAGGCTCTTGGATGAATGC
<i>Pbr027510.1</i>	AAGAGAAACCTGCTGGCACT	CGTCTTAGGGTCGGGTTTGG
<i>Pbr002660.1</i>	ATATTCAAGCGCGGTCCGTC	AGCCGAGTCGAAGCAGAATC
<i>Pbr034785.1</i>	GCCCATTGACTTCTGGAGTGAGC	GCACTGATGTTCAAGAGACGTGGA
<i>Pbr013082.1</i>	TCCACGCAAATTTGGGAGCATC	AAGGTCTCGTCGTAGTCAACACC
<i>Pbr012328.1</i>	CCTGCCACCAGAAGTTGAACC	GGTTCCTCATAATCAGCATCGGA
<i>Pbr012855.1</i>	ATGCAACAACACCCGAGGCA	CACAATGCAACTGAAAGATGCACACA
<i>Pbr013718.1</i>	ATGTCGCAGTTAATCACTCGTCGTC	TCAAGCTACTAGGTATCGACAGGGC
<i>Pbr012857.1</i>	CAAGTCACGATCTGCCACGC	CTCTCTCTCTCAAATGAGCATCACGG
<i>Pbr001817.1</i>	TCCAGTTCAACCAACGGCTT	TCACGACTAGGATTCGCACG
<i>Pbr027436.1</i>	GCCACACCTACCAATCGCAT	AATTGCGCCGTGTTTTACCT
<i>Pbr011956.1</i>	CTTCAGAGCGCCATTGATGC	CATCGTAATCACCCAGCGGA
<i>Pbr029836.1</i>	GCAGCCACTGCTCTGGCAAA	GGATCCCGATGGCAACATCTGG
<i>Pbr019138.1</i>	CCTCTGATGATGATTCTGACTTCCG	GTCTCTCCCCCTTTTTGTCATAGG
<i>Pbr036733.1</i>	CATGGTCGTCTTGGCATCGTC	AGTCCATGTGCACAATGCCGA
<i>PbrAGP1-pCold</i>	ATGGGAGGCTGTGCGAG	AACATCAACAAGAGGTGCATCC
<i>PbrAGP2-pCold</i>	ATGGGTTTTCTTCACAAGCT	AGTTCCCATAAAGGTAAGGTTC
<i>PbrAGP3-pCold</i>	ATGCTTAGGAAGCCGTCT	GGCTACGTATACATACCAGTCG
<i>PbrAGP4-pCold</i>	ATGACGCCCAAGCCCT	AAAGAAATTGTAGGATGATGATG
<i>PbrAGP5-pCold</i>	ATGGCTGCACCTCTAAAG	ATGCAAGTAAAGGGCCAAT
<i>PbrAGP6-pCold</i>	ATGGAAAAGCTGAGTACATTGT	TCTAGGACTTCGAGGGAGG

PbrAGP7-pCold	ATGGCGGAAGAGCACA	AATCTTCTCGAGCTTCTCG
PbrAGP8-pCold	ATGGCGGACAACAAAGA	ATCTTGTCCTGAGG
PbrAGP9-pCold	ATGCTGTCTGACCGCAC	GAGGAGGAGGAGGACCG
PbrAGP10-pCold	ATGGCAGATTCTCCTCCTC	ATGAGGAATTTTGGAGGCT
PbrAGP11-pCold	ATGTATTTGCTCGGAAGGTT	AATGAGCATCACGGAAGTC
PbrAGP12-pCold	ATGGTATGCAAGCCCCG	CTTGATCAAGGAAGCAATGG
PbrAGP13-pCold	ATGGCTGGGGGTCGG	AAATTTGGACAGTGGGACGTT
PbrAGP14-pCold	ATGTCTCTGTTGAGTCTTACTGG	ATCGAACAAATTGAAAAGTCC
PbrAGP15-pCold	ATGGCGGAATCCAAACC	AGTCCCAAACCCACCTTC
PbrAGP16-pCold	ATGACCACTCCCAAGCC	AAAGAATTTGTAGGATGCTGATG
PbrAGP17-pCold	ATGCAAGAACCAATCGCA	GTTTTTTATGAGCCTTGAGAGAT
PbrAGP18-pCold	ATGCAAGATGAGTCAGTCACAT	GTTTTTTATGAGCCTTGAGAGAT
PbrAGP19-pCold	ATGCAATCCCCTGCATC	CATGACCAAAACAGCAGC
PbrAGP1-as-ODN	GTCCTCTGCCGCGGCCGGAGCTG	
PbrAGP4-as-ODN	GAGGGCTTGGGCGTGGCAGCAG	
PbrAGP5-as-ODN	CGGAGGCGGGAGTTGCAGCGGGGC	
PbrAGP8-as-ODN	GGCACCACCCAGGGAGGAGTAGA	
PbrAGP9-as-ODN	AGGCAGCTGCAAGCGGCTGAGGA	
PbrAGP10-as-ODN	CCCAGCACCGTTCCAGCACATG	
PbrAGP12-as-ODN	CCCATCCCCACACGTCACAGCA	
PbrAGP14-as-ODN	GGGCGGCAGCCGCGCTGACACCTGG	
PbrAGP16-as-ODN	TTGGGAGTGGTAGCAGCAGATGGGGA	
PbrAGP18-as-ODN	TGGGGCAGCCGCGGTCCCAGAC	
PbrAGP19-as-ODN	CGGCCACAGACCCGGCGGCGGAG	
PbrAGP1-GFP	ATGGGAGGCTGTGCGAGC	AACATCAACAAGAGGTGCATC
PbrAGP5-GFP	AACATCAACAAGAGGTGCATC	ATGCAAGTAAAGGGCCAA

Appendix B Maximum Likelihood fits of 56 different amino acid substitution models

Model	#Param	BIC ¹⁾	AICc ²⁾	lnL ³⁾	Invariant	Gamma
JTT ⁴⁾ +G	390	23588.36	21161.13	-10153.5	n/a	9.785037
JTT+G+I	391	23596.77	21163.53	-10153.5	0	9.785037
WAG+G	390	23635.66	21208.43	-10177.2	n/a	24.66423
WAG+G+I	391	23644.08	21210.83	-10177.2	0	24.66423
JTT+I	390	23660.14	21232.91	-10189.4	0	n/a
JTT	389	23665.06	21243.84	-10196.1	n/a	n/a
WAG	389	23681	21259.78	-10204.1	n/a	n/a
WAG+I	390	23701.96	21274.73	-10210.3	0	n/a
Dayhoff+G	390	23751.77	21324.54	-10235.2	n/a	7.756117
Dayhoff+G+I	391	23760.18	21326.94	-10235.2	0	7.756117
Dayhoff	389	23814.59	21393.38	-10270.9	n/a	n/a
LG+G	390	23817.74	21390.51	-10268.2	n/a	30.45989
LG+G+I	391	23826.16	21392.91	-10268.2	0	30.45989
Dayhoff+I	390	23828.14	21400.91	-10273.4	0	n/a
LG+I	390	23843	21415.77	-10280.8	0	n/a
LG	389	23847.9	21426.69	-10287.5	n/a	n/a
rtREV+G	390	23848.2	21420.97	-10283.4	n/a	34.36419
rtREV+G+I	391	23856.61	21423.37	-10283.4	0	34.36419
rtREV	389	23859.35	21438.14	-10293.2	n/a	n/a
rtREV+I	390	23872.14	21444.91	-10295.4	0	n/a
WAG+G+F	409	23878.61	21337.28	-10218.7	n/a	22.30588
WAG+G+I+F	410	23887.02	21339.7	-10218.7	0	22.30588
WAG+F	408	23887.27	21351.94	-10227.3	n/a	n/a

WAG+I+F	409	23919.34	21378.01	-10239.1	0	n/a
LG+G+F	409	23921.16	21379.83	-10240	n/a	21.42694
LG+G+I+F	410	23929.57	21382.25	-10240	0	21.42694
rtREV+F	408	23941.77	21406.44	-10254.5	n/a	n/a
LG+F	408	23950.29	21414.96	-10258.8	n/a	n/a
rtREV+I+F	409	23950.62	21409.29	-10254.7	0	n/a
rtREV+G+F	409	23952.03	21410.7	-10255.4	n/a	29.25965
LG+I+F	409	23953.43	21412.1	-10256.1	0	n/a
rtREV+G+I+F	410	23960.44	21413.12	-10255.4	0	29.25965
mtREV24+G+F	409	23978.35	21437.02	-10268.6	n/a	24.17341
mtREV24+G+I+F	410	23986.76	21439.44	-10268.6	0	24.17341
mtREV24+F	408	24000.32	21464.99	-10283.8	n/a	n/a
mtREV24+I+F	409	24002.68	21461.35	-10280.8	0	n/a
JTT+G+F	409	24027.98	21486.66	-10293.4	n/a	7.727536
JTT+F	408	24031.99	21496.66	-10299.6	n/a	n/a
JTT+G+I+F	410	24036.4	21489.08	-10293.4	0	7.727536
cpREV ⁶ +G	390	24043.84	21616.61	-10381.3	n/a	18.0617
JTT+I+F	409	24050.74	21509.41	-10304.8	0	n/a
Dayhoff+G+F	409	24051.2	21509.87	-10305	n/a	4.550053
cpREV+G+I	391	24052.25	21619.01	-10381.3	0	18.0617
Dayhoff+G+I+F	410	24059.61	21512.29	-10305	0	4.550053
cpREV	389	24080.15	21658.94	-10403.6	n/a	n/a
Dayhoff+F	408	24097.67	21562.33	-10332.5	n/a	n/a
Dayhoff+I+F	409	24099.8	21558.48	-10329.3	0	n/a
cpREV+I	390	24131.78	21704.55	-10425.2	0	n/a
cpREV+G+F	409	24180.1	21638.78	-10369.5	n/a	18.0617

cpREV+G+I+F	410	24188.52	21641.2	-10369.5	0	18.0617
cpREV+F	408	24193.91	21658.58	-10380.6	n/a	n/a
cpREV+I+F	409	24219.95	21678.62	-10389.4	0	n/a
mtREV24 ⁷⁾ +G	390	24665.77	22238.54	-10692.2	n/a	18.99252
mtREV24+G+I	391	24674.18	22240.94	-10692.2	0	18.99252
mtREV24	389	24685.62	22264.41	-10706.4	n/a	n/a
mtREV24+I	390	24714.68	22287.45	-10716.7	0	n/a

¹⁾ Bayesian Information Criterion; ²⁾ Akaike Information Criterion, corrected; ³⁾ Maximum Likelihood value; ⁴⁾ Jones-Taylor-Thornton; ⁵⁾ General Reverse Transcriptase; ⁶⁾ General Reversible Chloroplast; ⁷⁾ General Reversible Mitochondrial

Appendix D Expression level analysis of *PbrAGP* in RNA-seq database

Gene ID	Subfamily	length(aa)	S1_Fruit1	S2_Fruit1	S3_Fruit	S4_Fruit1	S1_Leave	S2_Leave	S3_Leaves1	S4_Leaves1	Petal_1	Sepal_1	Ovary_1	stem_1	bud_1
<i>Pbr025807.1</i>	EXT-AGP	663	0	0.0549526	0.110008	0.215816	0.0698915	0.0720625	0.0697572	0.0684347	0.183097	0.0855378	0.0337016	0.133214	0.0918105
<i>Pbr013082.1</i>	EXT-AGP	423	0	0	0	0	0	0	0	0	0	0.0395382	0	0	0
<i>Pbr023944.1</i>	lysine AGP	771	0	0	0	0.0443064	0	0	0	0	0.102128	0.0816916	0.188273	0.0132637	0.0579119
<i>Pbr027972.1</i>	lysine AGP	291	0	0	0	0	0	0	0	0	0	0.105253	0.10148	0	0
<i>Pbr039415.1</i>	classical	282	0	0	0	0	0	0	0	0	0	0.114237	0	0	0
<i>Pbr013718.1</i>	AG peptide	216	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr042412.1</i>	AG peptide	213	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr009088.1</i>	AG peptide	156	0	0	0	0	0	0	0	0	0	0	0.144902	0	0.312783
<i>Pbr007726.1</i>	classical	381	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr034486.1</i>	classical	300	0	0	0	0	0.271764	0	0	0.268295	0	0	0.0932057	0	0
<i>Pbr027436.1</i>	AG peptide	204	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr022452.1</i>	FLAs	1338	0	0	0	0	0	0	0	0	0.0235026	0.261533	0	0	0
<i>Pbr001817.1</i>	AG peptide	261	0	0	0	0	0	0	0	0	0.14961	0.550613	0	0	0
<i>Pbr012857.1</i>	FLAs	1332	0	0	0	0	0	0	0	0	0.0118591	0.272228	0	0	0
<i>Pbr032913.1</i>	AG peptide	237	0	0	0	0	0	0	0.509485	0	0	0.49342	0	0	0.768653
<i>Pbr039425.1</i>	EXT-AGP	2811	0	0	0	0	0	0	0	0.0126403	0.514925	1.62838	0.0322736	0	0
<i>Pbr012519.1</i>	lysine AGP	882	0	0	0	0	0	0	0	0	0.44928	2.35954	0.180894	0	0.0401005
<i>Pbr011956.1</i>	classical	861	0	0.0390585	0.0391622	0	0	0.204962	0.0497651	0.0486429	0.0998183	0.337432	0.103597	0.36293	0.0369087
<i>Pbr014495.1</i>	classical	381	0	0	0	0	0	0	0	0	0.335966	2.02768	0.0978347	0	0
<i>Pbr010124.2</i>	EXT-AGP	3030	0	0	0	0	0	0	0	0	0.747554	2.40483	0.0695008	0.00885993	0
<i>Pbr008237.1</i>	AG peptide	216	0	0	0	0	0	0	0	0	0.626689	0.7206	0	0	0
<i>Pbr040022.1</i>	lysine AGP	528	0	0.0760543	0.075954	0	0	0	0	0	3.94958	9.40759	0.123146	0.122159	0.0275772
<i>Pbr021263.1</i>	lysine AGP	537	0	0	0	0	0	0	0	0	1.5113	3.14646	0.119473	0	0.0266926

<i>Pbr003847.1</i>	classical	366	0	0	0	0	0	0	0.175424	0	2.6306	12.1735	0.270625	0.108766	0
<i>Pbr023217.1</i>	AG peptide	180	0	0	0	0	0	0	0	0	4.32531	14.003	0.945934	0	0
<i>Pbr032240.1</i>	classical	399	0	0	0	0	0	0	0	0	8.07063	27.3923	1.0504	0.26248	0
<i>Pbr029836.1</i>	AG peptide	159	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr021883.1</i>	AG peptide	195	0	0	0	0.80594	1.24782	0	0	0	0.222168	0	0.196961	0.964227	0
<i>Pbr012328.1</i>	AG peptide	234	0	0	0	0	0	0	0	0	0	0.334168	0.336082	0	0
<i>Pbr022563.1</i>	AG peptide	234	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr003859.1</i>	AG peptide	240	0	0	0.400795	0	0	0	2.92783	0	23.1993	37.1447	21.3589	1.17299	0.755314
<i>Pbr019989.1</i>	AG peptide	252	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr014561.1</i>	AG peptide	270	0	0	0	0	0.356493	0	0	0.706182	0	0.381839	3.0919	2.57184	1.66076
<i>Pbr036733.1</i>	classical	279	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr008433.1</i>	lysine AGP	369	0	0	0	0	0	0	0	0	0.0596135	0.182157	0	0.0619664	1.29469
<i>Pbr037695.1</i>	lysine AGP	420	0	0	0	0	0	0	0	0	0.213758	131.072	182.44	0	0.227084
<i>Pbr026601.1</i>	classical	483	0	0	0	0	0	0	0.219765	0.43442	0.0318124	0	0.0290877	0	0
<i>Pbr019138.1</i>	classical	486	0	0	0.0861627	0	0.14741	1.5585	2.28565	5.6579	0	0	0	0.0285555	0
<i>Pbr042015.1</i>	EXT-AGP	840	0	0	0.0403962	0	0.0512969	0.0528603	0	0	0.0129136	0.0361321	0.0238223	0	0.0254999
<i>Pbr009832.1</i>	EXT-AGP	873	0	0	0	0.0758583	0.0983293	0.201796	0.0978309	0.143616	0.393881	1.16548	0.599295	0.0668094	0.0603422
<i>Pbr027716.1</i>	lysine AGP	912	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr037947.1</i>	lysine AGP	1023	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pbr022454.1</i>	FLAs	2874	0.000000054	0.00000182	8.78E-08	0.00000105	0.00000148	0.00000495	0.000000647	5.41E-08	0	0.459863	0.168972	0.00000118	0.000000772
<i>Pbr012855.1</i>	FLAs	2841	0.00996374	0.0802709	0.0302782	0.0500376	0.0383961	0.0922151	0.0514904	0.0749879	0.169912	0.321235	0.151911	0.151593	0.180003
<i>Pbr014494.1</i>	lysine AGP	879	0.0376968	0	0	0	0	0	0	0	0.324683	2.27652	0.097973	0.011022	0.0671998
<i>Pbr009236.1</i>	EXT-AGP	2106	0.0412637	0.0277128	0.0417948	0.0138013	0.0176704	0.0363817	0.0177603	0.0690342	0.0540115	0.0734082	0.165386	0.169805	0.183823
<i>Pbr032242.1</i>	lysine AGP	810	0.0417872	0	0	0	0	0	0	0	1.60393	6.6191	0.200544	0.0494234	0
<i>Pbr016025.1</i>	lysine AGP	720	0.0486764	0	0	0	0	0	0	0	0	0	0.0742879	0	0
<i>Pbr010657.1</i>	lysine AGP	660	0.0546871	0	0	0	0.703235	0.362545	1.3335	0.275437	0.700732	0.379068	0.0339402	0	0.0185004

<i>Pbr030329.1</i>	classical	996	0.0646611	0	0	0	0	0.128425	0.166526	0.121895	0.0410029	0.00955236	0	0.00931562	0
<i>Pbr004282.1</i>	classical	534	0.0738753	1.04689	1.19504	0.583801	0.379948	0.39203	0.0944862	0	0.868584	1.33062	3.28232	0.359083	0.728547
<i>Pbr002660.1</i>	lysine AGP	531	0.0744524	0	0	0	0	0	0	0	0	3.18664	4.24207	0.556181	0.0545525
<i>Pbr000552.2</i>	EXT-AGP	2550	0.0894733	0.0563216	0.430489	1.15667	0.0287346	0.0443671	0.404511	0.210453	1.71173	5.11104	0.46311	0.0182885	0.0386475
<i>Pbr031224.1</i>	lysine AGP	435	0.101794	0.103387	0	0	0	0	0.129764	0	0	0	0.180116	0	0.375711
<i>Pbr012520.1</i>	classical	381	0.128286	0	0	0	0	0	0	0	0.447955	2.49561	0	0	0
<i>Pbr032619.1</i>	lysine AGP	366	0.138297	0	0.139805	0	0	0	0	0	0	0	0	0.205721	0.129046
<i>Pbr033024.1</i>	classical	639	0.171472	0.115608	0.115918	0.283487	7.38981	18.6532	13.0972	28.1981	5.56075	1.45282	0.642736	0	0.274827
<i>Pbr018948.1</i>	lysine AGP	1371	0.355217	0.581949	0.69698	0.733478	0.399386	0.293773	0.429462	0.334524	0.740179	1.4991	0.77951	0.51055	0.498374
<i>Pbr018951.1</i>	classical	393	0.363801	0.246812	0	0	0	0	0.15419	0	0.0999373	0.988195	0.0453667	0.0908163	0
<i>Pbr034785.1</i>	lysine AGP	5466	0.408184	3.01489	5.5368	4.53055	3.00002	1.08206	1.99731	2.79262	3.07582	2.19548	2.87322	2.04253	3.13815
<i>Pbr001944.1</i>	EXT-AGP	462	0.461447	0.936281	0.653282	2.17705	50.5993	138.586	28.1504	76.2393	0.800167	1.20767	0.825918	0.442397	2.47388
<i>Pbr001985.1</i>	lysine AGP	381	0.502709	1.04502	2.7376	2.11728	0.864177	0	0.750721	0.876658	0.944407	1.69038	1.44859	0.297568	1.34473
<i>Pbr039582.1</i>	lysine AGP	477	0.526342	0.0889592	0	0.258975	0.112888	0	0	0.110772	0	0	0	0	0
<i>Pbr009509.1</i>	AG peptide	267	0.568839	3.52229	8.59871	4.53065	2.94354	5.35822	4.94881	6.19765	3.65313	5.39625	5.98777	4.69403	3.46224
<i>Pbr004293.1</i>	lysine AGP	849	0.629959	0.119265	0.19929	0.39239	1.36653	0.99092	0.759672	1.73287	2.1629	1.70862	2.13599	1.4919	2.42301
<i>Pbr020882.1</i>	classical	849	0.669332	0.516813	0.279006	0.902497	2.17632	4.74599	1.77257	2.22798	2.39191	2.29003	1.51397	1.54973	5.61183
<i>Pbr003147.1</i>	classical	1125	0.754502	0.9302	0.141483	27.99	392.585	1220.16	716.144	717.033	12.2692	44.3231	6.95075	0.230764	10.5804
<i>Pbr034197.1</i>	classical	303	0.822249	1.47491	0.4893	0.982291	2.53822	1.65166	1.03335	0.785955	6.07633	16.8068	4.62555	4.17286	4.59818
<i>Pbr017851.1</i>	lysine AGP	1911	1.10151	1.66473	2.85112	2.68528	76.6545	25.6986	51.6257	17.4516	3.07594	2.86518	3.5211	2.43561	2.75275
<i>Pbr032370.1</i>	lysine AGP	858	1.12554	0.156919	0	0.0387279	0.199782	0.102931	0.349875	0.0977139	0.702117	1.22797	0.0809643	0.330538	0.0741936
<i>Pbr007919.1</i>	lysine AGP	438	1.19036	0.175852	0.179853	0	1.27462	3.20356	1.47404	1.60998	0.143753	0.55854	0.372667	0.887416	0
<i>Pbr041882.1</i>	classical	306	1.20546	0.41172	4.66543	2.69118	0	0	0.505301	0	0.488942	0.367812	0.264774	0.270651	0.500847
<i>Pbr036330.1</i>	EXT-AGP	921	1.28077	27.4681	120.197	358.682	63.2031	27.848	27.9804	140.438	12.9302	4833.86	2026.01	1014.59	139.711
<i>Pbr002040.1</i>	AG peptide	207	1.47759	2.34038	6.63196	3.15735	1.92536	3.09659	4.34629	1.92918	4.57529	5.83038	8.65617	4.65806	1.04419
<i>Pbr034492.1</i>	EXT-AGP	585	1.55206	0.523551	0.523453	0.256089	0.415896	0.257391	0.248617	0.407481	0.538583	1.42744	1.69038	9.06444	5.46209

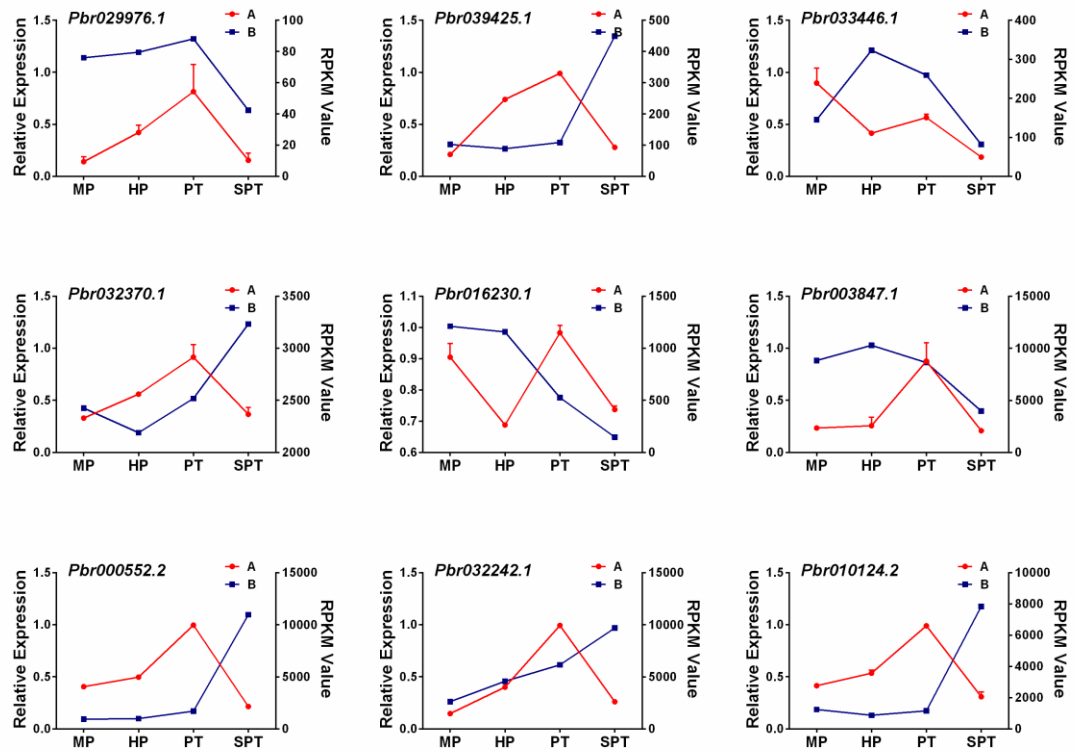
<i>Pbr033697.1</i>	lysine AGP	861	1.60844	3.46521	3.97108	3.28957	3.08308	3.46753	3.51327	5.36636	3.32802	2.90512	2.86226	2.72881	4.97782
<i>Pbr024390.1</i>	lysine AGP	450	1.6369	2.73642	4.28445	5.57875	10.4108	14.4644	19.5296	25.428	2.60972	3.58793	3.55383	1.76809	4.28612
<i>Pbr038123.1</i>	lysine AGP	5451	1.68046	8.8748	13.2036	13.5846	25.5382	17.294	16.9432	13.753	13.0523	10.4674	11.8171	9.60271	17.7464
<i>Pbr017405.1</i>	EXT-AGP	1131	1.69393	0.672256	0	0	18.9501	21.4301	12.5595	5.47703	0.0174002	2.03395	3.38467	0.252921	3.27348
<i>Pbr036716.1</i>	classical	291	2.03878	1.86095	0.457162	0.646056	13.402	20.9304	9.15933	14.6592	2.22009	4.23958	1.47892	0.396454	0.777511
<i>Pbr037483.1</i>	lysine AGP	504	2.09419	0.897899	0.407346	0	0.518198	0	0.102974	0.304932	0.351597	0.960766	1.01925	1.94415	9.95195
<i>Pbr040338.1</i>	lysine AGP	966	2.11399	7.65346	10.5774	7.06703	12.6604	11.9082	9.63377	6.36847	2.65783	4.23795	3.84335	29.1279	0.565289
<i>Pbr012754.1</i>	lysine AGP	576	2.27737	0.313516	0.936529	1.47332	5.59496	4.65533	9.98815	10.8253	0.706126	0.862189	0.808269	1.01167	2.37319
<i>Pbr020506.1</i>	lysine AGP	699	2.3287	0.409333	0.307414	0	0.520738	2.41576	0.705872	0.89209	0.0400764	0.362481	0.854728	4.09716	2.71407
<i>Pbr018772.1</i>	AG peptide	180	2.4909	1.35762	1.31314	0	1.67787	0	0	0	0.432531	0.350075	0.756748	0.72666	0.536744
<i>Pbr026715.1</i>	classical	939	2.51069	5.92389	4.25163	3.57862	14.9422	16.0952	13.1945	11.179	6.78808	6.55822	6.82871	3.05111	4.33678
<i>Pbr021831.1</i>	classical	297	2.58651	0.663353	0	0	0	0	0	0	1.70243	1.09748	1.6305	30.0699	4.05338
<i>Pbr027684.3</i>	lysine AGP	735	2.66863	1.86461	2.73402	1.21477	1.24826	1.48195	1.78386	3.01409	2.28044	2.15765	3.23529	2.6355	6.16443
<i>Pbr016784.1</i>	AG peptide	174	2.74873	1.47762	2.91777	2.49233	5.55029	2.04293	3.40736	1.83837	0.838303	0.353104	1.10352	1.39745	0.718799
<i>Pbr015994.2</i>	classical	1719	3.73242	13.4157	18.274	16.3116	12.1322	10.2842	13.3188	11.5497	4.85886	4.87113	8.87077	8.64595	14.7533
<i>Pbr009514.1</i>	lysine AGP	1767	3.78677	3.46282	3.31589	4.04172	5.77096	5.51066	3.12799	4.47281	2.359	2.06784	2.83044	3.01118	7.37525
<i>Pbr025627.1</i>	lysine AGP	504	3.86619	3.83648	4.31787	6.43228	28.2936	27.275	28.112	19.2107	19.0448	12.3253	12.0701	3.94157	10.4057
<i>Pbr006420.1</i>	lysine AGP	900	3.91687	11.7143	7.30076	8.28751	12.4693	11.5387	10.7874	11.0453	7.80747	1.61007	0.977054	3.52147	7.54384
<i>Pbr000964.1</i>	lysine AGP	2568	4.07372	13.9073	15.6734	12.5611	18.979	17.7894	20.1454	17.5172	12.5606	11.6222	11.2383	10.4024	19.3684
<i>Pbr019191.1</i>	lysine AGP	453	4.09608	6.28358	7.61008	8.14001	5.5173	3.16553	5.46864	9.14689	2.75461	2.31309	1.81879	1.97396	3.46056
<i>Pbr033446.1</i>	AG peptide	210	4.16073	1.45998	6.90327	2.97764	0.902267	0	0.818661	1.8101	0.860884	1.45815	0.759902	0.385975	0.518154
<i>Pbr020635.1</i>	classical	414	4.31594	14.9644	15.3334	10.3979	13.8259	8.69122	13.9518	7.8405	17.3194	22.1856	29.5366	14.8349	28.3647
<i>Pbr013226.1</i>	lysine AGP	819	4.69726	1.58122	1.08448	1.02611	1.43016	1.69217	1.11271	1.60648	6.23581	5.29256	6.08382	1.02175	3.70452
<i>Pbr042627.1</i>	EXT-AGP	546	4.85864	9.69501	13.2278	6.84922	9.74319	8.72447	11.4337	8.4689	13.4306	11.8504	11.2067	8.60322	8.66186
<i>Pbr025412.1</i>	lysine AGP	2676	5.0596	8.73125	11.8273	11.0605	14.2679	10.7695	16.9856	16.62	11.1991	14.6309	13.7942	9.10126	14.4377
<i>Pbr030851.1</i>	AG peptide	261	5.16503	0.628087	0	0.849901	6.68488	2.45542	6.0246	1.5598	2.69298	2.47776	4.8407	3.70667	2.96071

<i>Pbr004873.1</i>	classical	939	5.31675	8.63901	7.44035	4.06661	13.2399	14.4676	13.889	13.799	6.64426	6.36439	7.85033	3.5639	4.44798
<i>Pbr041459.1</i>	EXT-AGP	5883	5.51815	7.7969	7.41788	5.25025	6.32016	4.35448	5.40245	4.15272	4.56364	3.19881	3.34062	6.80824	7.16152
<i>Pbr015909.1</i>	lysine AGP	438	5.5356	3.98592	3.2571	3.5546	5.70132	3.74781	5.26074	4.3251	4.90749	5.26699	6.105	3.85188	7.68156
<i>Pbr018953.1</i>	lysine AGP	2556	5.56684	38.9287	42.4117	25.3853	19.5763	20.2984	19.4128	15.1708	20.0647	16.3433	18.9074	15.7487	18.2404
<i>Pbr038622.1</i>	lysine AGP	6582	5.57748	15.4767	19.969	17.5852	15.0248	11.1725	12.2846	12.2747	10.6169	8.88172	11.1779	20.1606	18.0528
<i>Pbr026491.1</i>	lysine AGP	1152	5.89619	16.893	13.4319	7.55445	15.9194	21.1923	20.7739	12.8824	23.8733	16.0081	19.9197	14.7094	34.7233
<i>Pbr038330.1</i>	classical	351	6.14968	1.53025	4.0933	1.01729	5.41492	9.00731	13.1057	10.2778	4.14453	5.10211	12.012	21.2404	6.55531
<i>Pbr023043.1</i>	lysine AGP	363	6.32207	1.5752	0.852081	6.82236	10.6842	12.5534	3.38471	5.8785	0.18326	2.99383	1.16096	11.0066	55.5589
<i>Pbr015686.1</i>	lysine AGP	273	6.41639	8.54095	14.0163	14.8446	6.22288	3.95293	3.99652	2.39583	15.7542	14.9971	22.6217	14.9631	24.7997
<i>Pbr040921.1</i>	classical	735	7.43783	2.24982	0.335653	0.0471146	1.40094	1.31848	0.85212	0.298072	0.328643	1.47551	6.24333	16.3346	8.87926
<i>Pbr035082.1</i>	classical	474	8.41711	6.20008	5.37616	4.7071	6.61311	7.18083	11.7658	19.133	3.13753	2.78746	4.58703	6.71934	7.05023
<i>Pbr042884.1</i>	classical	960	8.96711	10.9925	12.9311	17.2268	18.2758	9.88293	18.9081	27.1752	3.39821	3.84318	6.50515	5.37775	7.76079
<i>Pbr014131.1</i>	classical	936	9.51028	8.68367	8.35418	7.60201	26.8017	31.5765	32.0692	29.1546	11.249	9.51098	8.85414	4.60878	5.86097
<i>Pbr041485.1</i>	lysine AGP	1038	9.99658	22.5	16.4755	14.6555	13.9549	18.2032	13.5093	11.518	8.18138	7.6861	8.56611	11.2609	9.94341
<i>Pbr038683.3</i>	EXT-AGP	1212	10.0872	15.1303	14.3629	14.4944	14.5918	16.5118	16.0711	17.3326	10.711	11.3397	13.2699	11.8257	21.0534
<i>Pbr014790.1</i>	classical	309	10.1982	32.0747	47.7335	23.169	11.924	11.3068	17.2548	13.5127	39.3406	61.769	79.8407	56.0573	80.1378
<i>Pbr028004.1</i>	lysine AGP	1197	10.5469	38.4078	43.9571	45.6493	25.1377	36.4113	92.4111	45.5183	41.6933	64.7596	76.4321	70.1785	63.5981
<i>Pbr009174.2</i>	lysine AGP	423	11.2015	11.4918	7.12099	6.06137	5.90735	7.0978	5.4366	7.55539	10.2228	7.43318	9.03838	8.39822	19.5932
<i>Pbr014097.1</i>	EXT-AGP	1980	11.6261	6.94099	10.5475	14.5658	14.6626	11.2283	12.0839	8.1225	20.7526	10.5059	9.26423	12.9585	11.5813
<i>Pbr010184.2</i>	lysine AGP	3171	11.8104	20.8119	25.3241	18.0083	15.752	16.4424	15.8567	16.4476	11.8081	9.97901	10.8663	18.4272	14.1521
<i>Pbr029514.1</i>	lysine AGP	543	12.2454	35.3044	33.3745	27.5443	2.22398	0.286817	0.276617	0	15.6323	9.46784	9.44151	0.998862	1.88138
<i>Pbr011185.2</i>	classical	822	12.3078	27.4022	34.8905	21.4449	11.6513	9.07355	11.5613	13.3592	26.5508	28.618	43.2798	31.6296	46.1913
<i>Pbr027582.2</i>	EXT-AGP	2430	13.4059	20.0791	49.6481	158.288	76.401	31.9576	29.6956	18.678	194.014	44.6354	21.925	8.88993	15.496
<i>Pbr023068.1</i>	lysine AGP	429	13.6476	16.511	24.3389	18.4831	109.866	56.8245	205.389	141.474	154.538	167.851	61.7476	45.3821	7.0771
<i>Pbr012665.1</i>	AG peptide	249	14.5849	15.5801	26.4058	20.7696	24.7238	11.6754	22.8108	31.9871	173.358	132.49	91.0086	8.59965	12.6012
<i>Pbr019320.1</i>	lysine AGP	1077	14.9505	10.2729	10.2214	8.82227	14.3729	13.87	11.7909	13.7925	8.24082	8.04766	9.16097	7.31163	11.2308

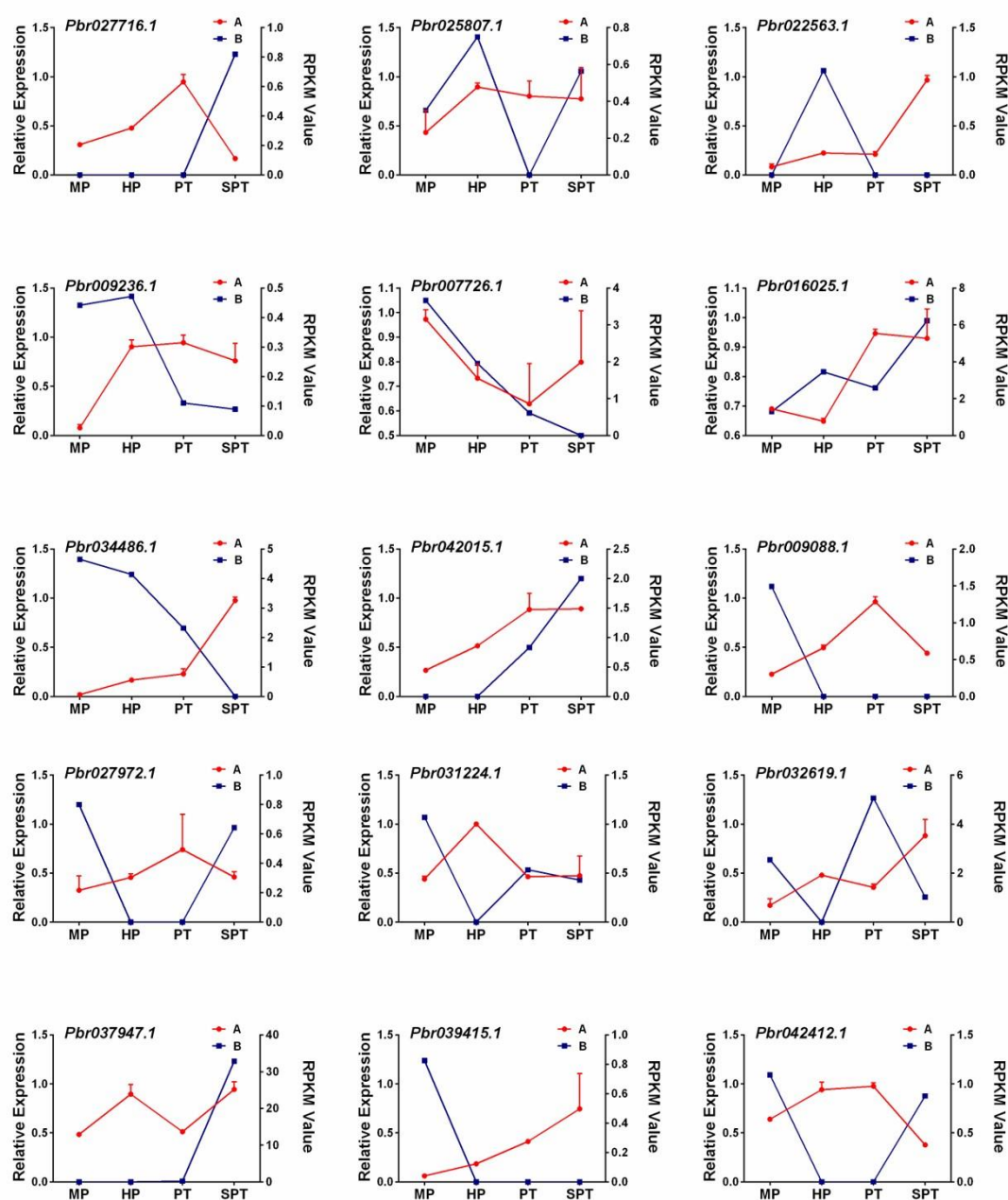
<i>Pbr024056.2</i>	classical	732	15.9559	20.3578	19.4278	14.4463	37.0493	7.38545	75.9377	40.3371	50.7145	45.6241	15.2458	28.13	6.55302
<i>Pbr017051.1</i>	AG peptide	267	16.7807	74.7672	102.898	54.9008	65.1259	42.8658	76.353	51.7686	126.183	161.414	273.399	182.645	221.016
<i>Pbr038280.1</i>	classical	642	16.9805	11.4863	5.34471	2.30991	98.0827	28.7677	106.742	39.1935	15.9331	113.759	53.9097	20.2563	41.072
<i>Pbr038344.1</i>	lysine AGP	942	16.9906	25.3567	24.4549	21.3742	11.2976	6.96543	10.9578	11.5703	39.0769	15.937	9.86197	5.96931	13.1887
<i>Pbr041476.1</i>	lysine AGP	645	17.6623	25.1081	29.9797	50.4992	33.6709	50.2836	47.1333	45.5515	25.471	12.5815	15.956	15.6171	6.24713
<i>Pbr032758.1</i>	classical	1125	18.0522	36.7852	31.2961	21.7327	44.3524	55.227	44.0006	32.0169	14.0408	12.4878	16.3825	18.8033	28.867
<i>Pbr021053.1</i>	classical	294	18.7765	5.89496	0	0.630918	2.85345	0.296114	0.554005	0.281851	13.5807	10.4609	14.0954	25.446	4.35329
<i>Pbr025221.2</i>	lysine AGP	513	20.5425	3.65443	0.951711	0.541417	1.715	0.624639	0.501366	0.0989265	0.793428	2.15679	5.23444	9.08116	9.31011
<i>Pbr042662.1</i>	AG peptide	234	21.0205	10.068	8.78773	1.5804	11.0466	13.684	13.3216	13.0464	10.9244	15.1826	14.6196	16.2514	11.6319
<i>Pbr038305.1</i>	lysine AGP	2283	21.148	45.464	11.014	27.435	197.995	272.72	230.156	120.425	143.244	179.639	56.1562	9.63352	40.7708
<i>Pbr003361.1</i>	EXT-AGP	696	22.217	16.4839	8.77107	11.7521	13.6205	17.7936	14.2367	14.8561	23.4734	24.6727	30.5344	25.5856	41.8705
<i>Pbr040628.2</i>	lysine AGP	1035	23.489	28.4024	33.4721	19.9165	64.5831	48.6705	49.4541	51.12	16.6889	14.2323	27.8926	21.9336	20.8793
<i>Pbr009752.1</i>	lysine AGP	1968	24.5252	20.6363	22.0382	25.3355	61.0859	84.786	63.4762	66.9432	41.5869	33.5869	29.0292	31.2714	19.7463
<i>Pbr006182.1</i>	classical	966	24.6508	30.4784	37.0662	17.8853	3.45037	1.5996	4.14727	1.47614	13.7531	15.2664	21.6213	29.2115	7.03471
<i>Pbr020669.1</i>	classical	825	24.7803	83.8951	86.4135	100.862	37.3659	44.0765	35.9631	36.2479	16.1582	11.7469	12.2635	15.3015	12.9376
<i>Pbr037652.1</i>	classical	777	25.3428	43.0521	62.5921	61.5505	13.3158	7.29989	11.3307	7.7624	11.5992	10.6085	22.9406	40.5004	44.3874
<i>Pbr016246.1</i>	lysine AGP	753	26.373	21.3788	26.8079	12.0562	21.2453	16.7883	22.0608	25.527	8.1395	8.04788	9.12925	23.326	8.01418
<i>Pbr009796.1</i>	lysine AGP	1698	26.5622	28.7343	26.9688	26.6369	64.0976	88.3291	63.3399	64.9266	43.102	36.066	30.264	34.3177	23.0283
<i>Pbr042852.1</i>	AG peptide	159	28.7092	12.5162	23.976	16.8671	49.3228	59.8003	72.5335	104.581	20.3888	26.6242	45.1597	16.2153	12.1162
<i>Pbr037725.1</i>	lysine AGP	846	29.8319	51.3042	45.1483	31.7932	25.8615	29.3892	25.085	28.7454	39.2204	35.0973	41.825	44.1095	70.1811
<i>Pbr027978.1</i>	lysine AGP	498	30.2714	53.5711	67.9572	83.4376	38.1077	26.9111	43.097	49.5957	21.0862	26.3323	17.3431	41.2216	67.5399
<i>Pbr008255.1</i>	lysine AGP	1164	30.6554	40.0163	33.8964	25.7409	26.1833	29.7748	32.2763	43.5661	74.6533	68.2027	70.9575	43.0839	72.9843
<i>Pbr041187.1</i>	AG peptide	156	31.2341	116.048	342.897	235.124	164.099	137.14	194.466	142.87	88.6722	90.8564	140.41	58.9742	147.477
<i>Pbr004165.1</i>	classical	432	31.8179	2.82417	9.16451	49.7737	134.572	77.9384	364.081	83.9673	237.861	246.225	85.5716	91.0199	63.4461
<i>Pbr041061.1</i>	EXT-AGP	1260	33.549	46.3657	72.0861	57.7329	42.6554	40.2449	44.7649	39.3684	34.0263	35.8322	41.8423	33.0474	32.0916
<i>Pbr025304.1</i>	lysine AGP	897	38.8901	18.0342	14.1039	15.5067	119.777	57.9822	139.112	110.865	64.856	90.7186	112.765	49.7724	74.5821

<i>Pbr036427.1</i>	classical	1161	40.454	50.8653	58.0198	54.369	48.7888	30.5426	41.2222	28.1743	33.8549	33.5508	48.9079	43.3434	50.0807
<i>Pbr000742.1</i>	EXT-AGP	753	43.3148	36.2969	32.3268	24.1439	25.1961	25.5692	23.4909	22.0153	24.4203	26.6913	37.4343	29.4707	48.9431
<i>Pbr019821.1</i>	classical	2046	47.3211	49.6051	60.4255	61.4048	54.5869	31.4017	43.0559	27.2886	33.5392	30.4694	47.0407	57.6966	65.7136
<i>Pbr042836.1</i>	classical	300	48.3986	70.776	52.2545	50.6186	25.0023	25.3704	23.2547	31.9271	44.045	46.1427	43.2474	41.6249	46.5972
<i>Pbr004166.1</i>	lysine AGP	384	54.7558	18.6676	17.6453	36.2405	188.688	169.511	909.903	216.245	602.496	486.747	135.546	181.224	115.209
<i>Pbr026210.1</i>	AG peptide	210	55.4765	55.4791	98.7167	129.825	41.5043	50.1063	63.0369	88.6948	62.1988	53.9515	73.7105	65.4228	89.8134
<i>Pbr016755.1</i>	AG peptide	207	59.8423	32.7654	86.2155	50.5176	39.4698	42.3201	71.2792	57.8755	35.513	42.0881	53.8606	34.3532	29.7595
<i>Pbr016218.1</i>	classical	324	64.2174	55.5654	70.5901	58.6836	23.9675	7.0944	12.0525	21.3717	50.0008	34.3883	34.6174	60.2644	64.9605
<i>Pbr019673.1</i>	classical	300	71.1249	25.2463	20.6044	36.357	100.281	62.8623	56.2869	35.9515	45.0789	62.1713	77.4539	170.223	151.702
<i>Pbr035291.1</i>	classical	747	73.2419	48.844	44.9282	49.0466	182.966	153.499	182.862	114.528	31.4505	31.5512	18.1491	33.1642	37.317
<i>Pbr009055.1</i>	lysine AGP	888	73.5126	30.9629	29.3167	30.8809	217.745	122.803	185.59	171.231	58.3541	113.568	134.559	163.097	103.498
<i>Pbr008421.1</i>	lysine AGP	504	92.9497	25.5493	11.2428	13.1028	26.6354	8.55685	12.5629	3.15096	13.9174	8.01554	9.92428	21.3324	10.6779
<i>Pbr042667.1</i>	classical	291	94.4634	87.2322	78.4032	79.2496	56.7747	65.6119	49.9528	82.1144	297.175	564.999	402.977	599.694	305.34
<i>Pbr012943.1</i>	lysine AGP	636	94.6931	60.2696	66.803	54.3033	38.4351	60.1849	49.6299	57.4604	24.0383	37.3555	92.2996	33.3546	55.915
<i>Pbr030659.1</i>	lysine AGP	1176	107.043	93.4897	101.439	107.6	108.113	108.192	94.8532	113.838	108.707	94.4542	97.7995	95.6261	90.5545
<i>Pbr003445.1</i>	lysine AGP	336	110.458	1.00415	0.496878	0.474615	13.1025	3.93892	6.0053	3.33733	0.755082	18.7492	19.3222	37.0718	17.9827
<i>Pbr007577.1</i>	classical	570	118.6	179.575	132.826	157.882	146.134	145.913	212.599	200.853	281.006	178.839	76.0804	71.9161	56.517
<i>Pbr023359.1</i>	FLAs	1278	131.502	204.568	266.557	353.913	3.43349	0.222992	0.434479	0.423226	17.7721	15.593	63.7653	74.9586	52.9058
<i>Pbr027542.1</i>	lysine AGP	426	148.743	298.519	161.945	90.2835	34.3436	32.8196	32.3716	53.7207	172.292	207.11	198.206	359.456	12.9457
<i>Pbr025277.1</i>	AG peptide	225	152.183	287.263	383.148	267.561	106.512	162.969	109.204	69.3217	428.222	568.612	588.804	128.081	198.849
<i>Pbr029962.1</i>	classical	660	152.686	208.789	174.498	147.811	60.7595	84.618	72.0794	44.2764	23.8433	29.5845	33.0747	42.799	27.7691
<i>Pbr000340.1</i>	lysine AGP	1020	205.003	193.129	161.993	212.676	203.728	232.08	181.242	154.35	85.8629	72.5336	67.3959	66.245	44.1796
<i>Pbr007194.1</i>	classical	354	207.683	131.642	81.8489	88.2304	27.7638	30.1104	7.28692	2.61973	61.6835	41.2273	105.017	544.783	1941.32
<i>Pbr005226.1</i>	FLAs	771	302.986	81.8466	81.5154	128.134	10.8743	0.884817	1.2016	0.504047	34.5047	16.3519	14.0264	68.56	43.9551
<i>Pbr028963.1</i>	lysine AGP	420	506.615	647.723	1709.28	1539.02	452.215	606.255	953.196	1078.93	579.925	600.553	817.536	1180.07	932.632
<i>Pbr023485.1</i>	lysine AGP	465	702.855	436.496	155.64	124.459	302.344	175.265	200.644	177.203	1135.78	1456.12	930.581	699.214	382.14

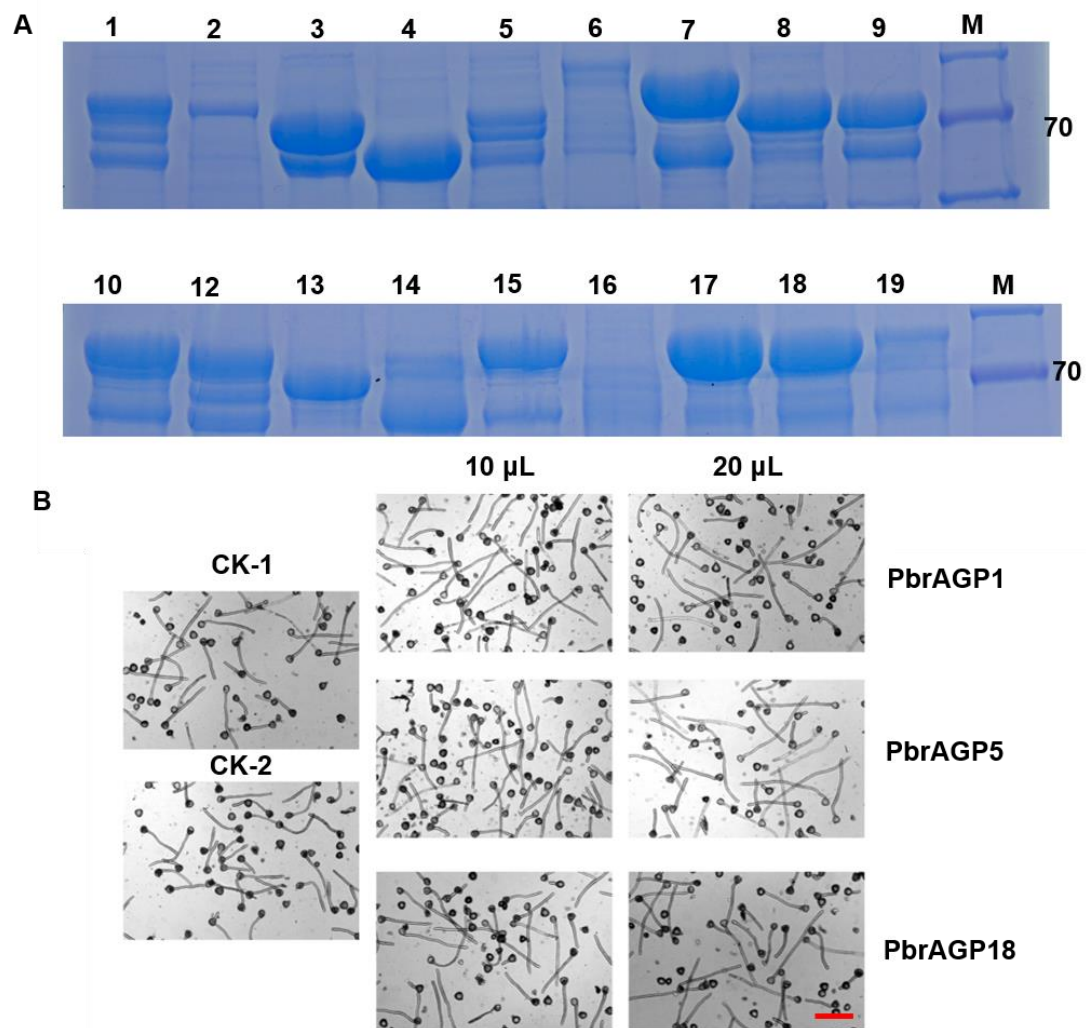
<i>Pbr039599.1</i>	lysine AGP	345	1144.58	12.5177	9.72768	10.5073	359.083	118.123	617.585	77.2505	43.1128	117.595	25.1739	25.7872	95.0434
<i>Pbr029976.1</i>	classical	300	1964.56	1294.04	1607.99	1332.35	186.159	86.5413	110.724	148.635	1089.34	1699.12	2002.8	1996.18	2064.69
<i>Pbr029276.1</i>	AG peptide	195	3384.94	7724.58	12687.9	15239.5	474.17	485.554	436.052	362.876	999.311	396.478	413.028	1273.17	373.055
<i>Pbr017881.1</i>	AG peptide	216	4224.99	2341.08	2685.86	3033.7	1547.35	4200.33	5968.64	3418.81	1115.3	1321.58	518.404	556.534	219.478
<i>Pbr016230.1</i>	classical	345	4583.07	1857.7	4092.73	2671.84	495.975	774.236	596.575	723.389	884.759	1899.72	7290.38	3207.52	2793.28
<i>Pbr013230.1</i>	AG peptide	195	7598.27	4465.67	2259.73	1021.22	2980.4	3887.47	3738.87	3197.32	1917.71	2818.54	4126.8	25926	1239.89
<i>Pbr027510.1</i>	AG peptide	216	10939.1	6296.54	4021.16	1880.32	9498.31	11816.5	8597.35	9539.79	214.371	319.266	418.255	8943.3	133.089
<i>Pbr000392.1</i>	AG peptide	264	14750.9	20103.2	12241	10046	1061.25	1426.72	2274.23	2047.5	8353.66	10130.5	13653.3	6041.27	3700.55



Appendix E RT-qPCR analysis of pollen highly expressed *PbrAGPs* during pollen tube growth. MP, HP, PT and SPT correspond to four different developmental stages: matured pollen, hydrated pollen, growing pollen tubes after six hours of hydration and stopped growing pollen tubes, respectively. A and B refer to relative expression level and RPKM values, respectively.



Appendix F RT-qPCR analysis of pollen-specific expressed *PbrAGPs* during pollen tube growth. MP, HP, PT and SPT correspond to four different developmental stages: matured pollen, hydrated pollen, growing pollen tubes after six hours of hydration and stopped growing pollen tubes, respectively. A and B refer to relative expression level and RPKM values, respectively.

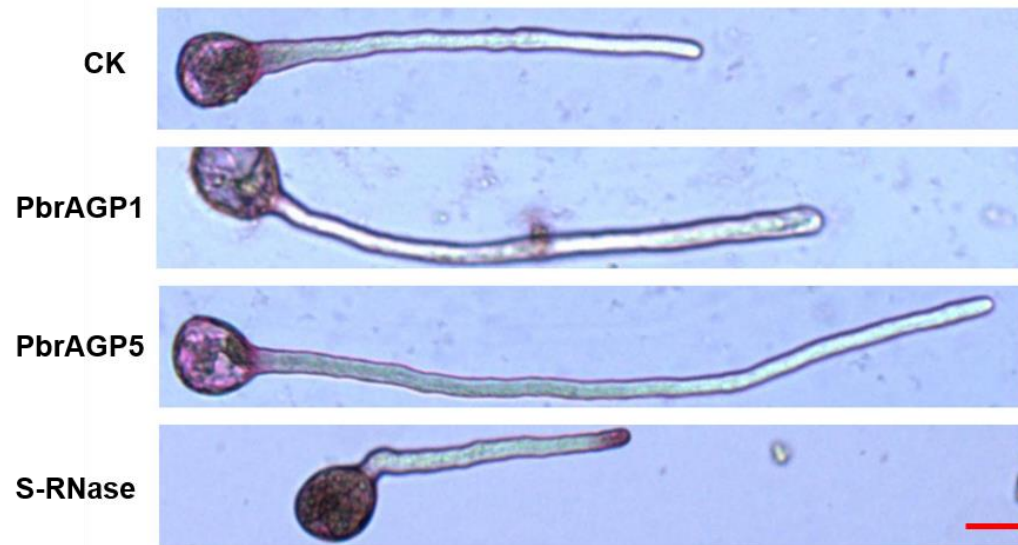


Appendix I Prokaryotic expression PbrAGP-his recombinant proteins and their influence on pollen tube growth of pear. A, Prokaryotic expression of PbrAGP-his proteins were tested using SDS-PAGE; B, Pollen tube morphological under the treatment of three PbrAGP-his recombinant proteins with different concentration, respectively, Bar=100 μ m.

Appendix J Significance differences analysis of pollen tube length between CK and PbrAGPs-his treatment

	CK	PbrAGP1	PbrAGP4	PbrAGP5	PbrAGP8	PbrAGP9
Average pollen tube length(μm)	266.532	178.7522	222.5177	195.2157	230.4517	242.763
	226.8687	208.3239	202.9471	221.4012	212.1891	255.1148
	247.09	209.5391	211.8522	204.0396	204.4751	254.263
T-test (P value)		0.0347	0.0545	0.0443	0.0871	0.7648
P value summary		* ¹⁾	NS ²⁾	*	NS	NS
	PbrAGP10	PbrAGP12	PbrAGP14	PbrAGP16	PbrAGP18	PbrAGP19
Average pollen tube length(μm)	230.9658	217.727	275.0262	240.5123	282.6801	242.3445
	176.1584	199.3392	245.9337	259.0599	292.2627	273.8889
	238.9119	231.2615	279.096	279.1858	248.0231	288.9427
T-test (P value)	0.2396	0.1052	0.2693	0.4698	0.1944	0.2943
P value summary	NS	NS	NS	NS	NS	NS

¹⁾ P<0.05; ²⁾ non-significant



Appendix K The pectin distribution of pollen tube cell wall under the treatment of PbrAGP1-his and PbrAGP5-his recombinant protein. Bar=20μm.