

BLAST results

ORF	Position on scaffold 1	Direction	Accession number of the similarest sequence	E-value	Description	Source	Nucleotide sequences identities	Amino acid sequences identities	Conserved domain	Pru p 1 isoallergen*	Nomenclature in Yang et al., 2011	Notes
pORF1	9457845..9468256	↓	XP_002519184	0.0	Conserved hypothetical protein	<i>Ricinus communis</i>			FAR1 DNA-binding domain; MULE transposase domain; plant mutator transposase zinc finger			
pORF2	9473908..9474506	↓	XP_002519177	7.00E-47	GATA transcription factor, putative	<i>Ricinus communis</i>						
pORF3	9477268..9478482	↓	ABJ96377	1.00E-68	Hypothetical protein	<i>Prunus persica</i>						
pORF4	9492742..9495502	↓	XP_002519175	0.0	Protein COBRA precursor, putative	<i>Ricinus communis</i>			COBRA-like (COBL) proteins			
pORF5	9497081..9505718	↑	XP_002519174	3.00E-152	Sensor histidine kinase, putative	<i>Ricinus communis</i>			REC, Signal receiver domain			
pORF6	9507812..9508966	↓	XP_002282861	2.00E-62	Hypothetical protein isoform 2	<i>Vitis vinifera</i>						
pORF7	9511021..9513200	↓	XP_002519173	2.00E-45	Drought-induced protein D19-like protein	<i>Arabidopsis thaliana</i>			Drought induced 19 protein (Dri19)			
pORF8	9521977..9524246	↑	XP_002271465	4.00E-73	Hypothetical protein	<i>Vitis vinifera</i>						
pORF9	9528048..9528658	↑	EU424246	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.04	<i>Prunus dulcis x Prunus persica</i>	622/622 (100%)	159/159 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.04	Pru p 1.04	
pORF10	9533326..9533754	↓	AY540509	1.00E-144	Prunus avium major cherry allergen Pru av 1.0203 mRNA	<i>Prunus avium</i>	424/491 (86%)	128/160 (80%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.08	Pru p 1.06F	After this paper this gene was re-named as <i>Pru p 1.08</i> because the nucleotide similarity with others <i>Pru p 1.06</i> CDSs is less than 95%
pORF11	9535128..9535640	↑	EU424248	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.05	<i>Prunus dulcis x Prunus persica</i>	527/576 (91%)	135/149 (90%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.09	absent	New
pORF12	9536323..9536918	↓	EU424252	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.06A	<i>Prunus dulcis x Prunus persica</i>	602/617 (97%)	155/160 (96%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.06F	absent	New
pORF13	9539456..9546755	↓	ABA96037	2.00E-73	Retrotransposon protein, putative, Ty3-gypsy subclass	<i>Oryza sativa (japonica cultivar-group)</i>			RT_LTR (Reverse transcriptases from retrotransposons); retropepsin-like aspartate proteases			
pORF14	9548440..9549057	↑	EU424248	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.05	<i>Prunus dulcis x Prunus persica</i>	618/618 (100%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.05	Pru p 1.05	Identical to pORF23
pORF15	9550585..9551176	↓	EU424253	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.06C	<i>Prunus dulcis x Prunus persica</i>	1108/1109 (99%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.06C	Pru p 1.06C	
pORF16	9554651..9555255	↓	EU424245	0.0	Prunus dulcis x Prunus persica putative allergen Pru du 1.04	<i>Prunus dulcis x Prunus persica</i>	615/615 (100%)	159/159 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.07	absent	Previously classified as the almond allele <i>Pru du 1.04</i> and after this paper re-named as <i>Pru p 1.07</i>
pORF17	9558593..9559178	↑	EU424244	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.03	<i>Prunus dulcis x Prunus persica</i>	623/623 (100%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.03	Pru p 1.03	
pORF18	9560832..9561420	↓	EU424250	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.06B	<i>Prunus dulcis x Prunus persica</i>	586/588 (99%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.06B	Pru p 1.06B	
pORF19	9565786..9566378	↓	EU424252	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.06A	<i>Prunus dulcis x Prunus persica</i>	681/690 (98%)	157/160 (98%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.06D	Pru p 1.06D	
pORF20	9566736..9569689	↑	XP_002528040	2.00E-45	Oxidoreductase, putative	<i>Ricinus communis</i>						
pORF21	9572416..9572710	↑	EU424248	2.00E-80	Prunus dulcis x Prunus persica putative allergen Pru p 1.05	<i>Prunus dulcis x Prunus persica</i>	207/224 (92%)		pseudogene			
pORF22	9574073..9574665	↑	EU424252	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.06A	<i>Prunus dulcis x Prunus persica</i>	868/868 (100%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.06A	Pru p 1.06A	
pORF23	9576054..9576692	↓	EU424248	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.05	<i>Prunus dulcis x Prunus persica</i>	678/679 (99%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.05	Pru p 1.05	Identical to pORF14
pORF24	9580182..9584686		AAM08562	6.00E-34	Putative retroelement	<i>Oryza sativa (japonica cultivar-group)</i>						
pORF25	9585782..9586368	↑	EU424252	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.06A	<i>Prunus dulcis x Prunus persica</i>	638/666 (95%)	154/160 (96%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.06E	Pru p 1.06E	
pORF26	9586947..9587557	↓	EU424248	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.05	<i>Prunus dulcis x Prunus persica</i>	568/619 (91%)		pseudogene			
pORF27	9591486..9592192	↓	EU424240	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.02	<i>Prunus dulcis x Prunus persica</i>	762/762 (100%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.02	Pru p 1.02	
pORF28	9596772..9597353	↓	EU424243	0.0	Prunus dulcis x Prunus persica putative allergen Pru p 1.01	<i>Prunus dulcis x Prunus persica</i>	586/586 (100%)	160/160 (100%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.01	Pru p 1.01	
pORF29	9604229..9604885	↓	XM_002516942	2.00E-27	Ricinus communis Major pollen allergen Car b 1 isoform	<i>Ricinus communis</i>	144/191 (75%)	89/161 (55%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.10*	absent	New
pORF30	9606195..9606783	↓	AY428589	6.00E-100	Malus x domestica clone 1n Mal d 1-like mRNA	<i>Malus x domestica</i>	290/332 (87%)	143/162 (88%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.11*	absent	New
pORF31	9608398..9608998	↓	XM_002516941	1.00E-42	Ricinus communis Major allergen Pru ar	<i>Ricinus communis</i>	205/272 (75%)	115/160 (71%)	Polyketide cyclase / dehydrase and lipid transport	Pru p 1.12*	absent	New
pORF32	9609723..9612348	↓	CANT9553	8.00E-75	Hypothetical protein	<i>Vitis vinifera</i>			Heavy-metal-associated domain (HMA)			
pORF33	9613794..9618747	↑	NP_196685	6.00E-53	Transducin family protein / WD-40 repeat family protein	<i>Arabidopsis thaliana</i>			WD40 domain			
pORF34	9620828..9623355	↑	ABA99544	6.00E-96	Glycoside hydrolase family 28 protein, putative	<i>Oryza sativa (japonica cultivar-group)</i>			Glycosyl hydrolase family 28 includes polygalacturonase, polygalacturonase			
pORF35	9628283..9635407	↑	XP_002512473	0.0	WD-repeat protein, putative	<i>Ricinus communis</i>			2 WD40 domain			
pORF36	9643316..9648452	↓	XP_002271110	0.0	Hypothetical protein	<i>Vitis vinifera</i>			RNA-binding protein of the Puf family, transitional repressor			

* The name for Pru p 1 isoallergen genes reported here for the first time were proposed following the official allergen nomenclature (King et al., 1995; Gao et al., 2005).