

Zusätzliche Informationen zur Dissertation von Yvonne Gäßler, 2007

Tabelle 7-6: Liste von Genen, deren Expression durch Pep13-Behandlung nach 1 h induziert wird.

cDNA-AFLP-Analyse in Petersilie, Fragmente pc1-pc251.

Farblich unterlegt sind jeweils die Gene, deren Expression sowohl nach einer als auch nach vier Stunden (hellgrün) erhöht war; die Fragmente, die in die nähere Auswahl kamen (hautfarben) sowie Gene aus Petersilie, deren Induzierbarkeit schon bekannt ist (gelb).

Klon	Länge [bp]	BlastX [AS/AS]	Organismus	AGI Code	Accession-nummer	Protein/Mögliche Funktion
PC14-1	118					no significant similarity found
PC14-2	116					no significant similarity found
PC14-3	116					no significant similarity found
PC14-4	116					no significant similarity found
PC20-3	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 10)
PC20-4	177	18/32	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 8)
PC26-1	141					no significant similarity found
PC26-2	131					no significant similarity found
PC26-3	139					no significant similarity found
PC26-4	132					no significant similarity found
PC31-1	71					no significant similarity found
PC31-2	71					no significant similarity found
PC31-3	71					no significant similarity found
PC31-4	71					no significant similarity found
PC43-1	89					no significant similarity found
PC43-3	101	28/31	Arabidopsis thaliana	At1g05170	NP_172009	transferase, transferring glycosyl groups (see 12)
PC56-1	181					no significant similarity found
PC56-4	181					no significant similarity found
PC56-2	142					no significant similarity found
PC56-3	179	24/51	Arabidopsis thaliana	At1g59960	NP_176204	oxidoreductase
PC83-2	92					no significant similarity found
PC83-3	92					no significant similarity found
PC83-4	92					no significant similarity found
PC114-1	328	37/52	Arabidopsis thaliana	At5g60360	NP_568921	AALP

PC114-2	314	51/103	Arabidopsis thaliana		AAF19546	putative Ac transposase
PC114-3	180	43/59	Vicia sativa		AAD10204	cytochrome P450 (CYP94A1)
PC114-4	313	52/66	Arabidopsis thaliana	At1g13750	NP_172830	hydrolase/ protein serine/threonine phosphatase
PC133-1	46	15/15	Petroselinum crispum		AAB72241	omega-3 fatty acid desaturase (see 764-1)
PC133-2	46	15/15	Petroselinum crispum		AAB72241	omega-3 fatty acid desaturase (see 764-1)
PC133-3	46					no significant similarity found
PC133-4	46	15/15	Petroselinum crispum		AAB72241	omega-3 fatty acid desaturase (see 764-1)
PC135-1	55					no significant similarity found
PC135-2	55					no significant similarity found
PC135-4	55					no significant similarity found
PC135-3	55					no significant similarity found
PC146-1	293	55/85	Arabidopsis thaliana	At5g06060	NP_196225	oxidoreductase (see 144-1)
PC146-2	293	56/85	Arabidopsis thaliana	At5g06060	NP_196225	oxidoreductase (see 144-1)
PC146-4	293	56/85	Arabidopsis thaliana	At5g06060	NP_196225	oxidoreductase (see 144-1)
PC156-1	36					no significant similarity found
PC156-2	46					no significant similarity found
PC156-3	18					no significant similarity found
PC156-4	46	15/15	Petroselinum crispum		AAB72241	omega-3 fatty acid desaturase (see 764-1)
PC161-1	223					no significant similarity found
PC161-2	174	30/39	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC161-4	223	42/61	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC161-3	224	17/29	Medicago truncatula		ABE92227	conserved hypothetical protein
PC162-2	174	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 161-4)
PC162-3	184					no significant similarity found
PC162-4	188					no significant similarity found
PC163-1	142					no significant similarity found
PC163-3	142					no significant similarity found
PC163-2	174	30/39	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC163-4	174	30/39	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC164-1-1	176	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC164-1-2	174	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC164-1-3	174	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC164-1-4	176	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC164-2-2	174	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC164-2-1	118	18/39	Arabidopsis thaliana	At3g09220	NP_187533	copper ion binding
PC164-2-4	118	24/39	Arabidopsis thaliana	At3g09220	NP_187533	copper ion binding

PC164-2-3	126					no significant similarity found
PC178-1	77					no significant similarity found
PC178-2	229	19/46	Arabidopsis thaliana	At5g23570	NP_197747	SGS3 (SUPPRESSOR OF GENE SILENCING 3) (see 280-4)
PC178-3	237	56/70	Arabidopsis thaliana	At5g43330	NP_199147	malate dehydrogenase/ oxidoreductase
PC178-4	216	69/71	Petroselinum crispum		CAA34715	Phenylalanine ammonia-lyase 1 (see 177-4)
PC182-2	141	16/21	Medicago sativa		CAA67588	70 kD heatshockprotein (see 727-4)
PC182-3	142	17/27	Arabidopsis thaliana	At1g30740	NP_174361	electron carrier (ev. 543-3)
PC182-4	135	31/39	Arabidopsis thaliana	At1g15250	NP_172977	structural constituent of ribosome (see 4-3)
PC206-1	112					no significant similarity found
PC206-2	159					no significant similarity found
PC206-3	140	43/46	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 158-1)
PC206-4	156	34/40	Arabidopsis thaliana	At1g07770	NP_172256	RPS15A (RIBOSOMAL PROTEIN S15A)
PC207-1	143	21/27	Arabidopsis thaliana	At3g10330	NP_187644	RNA polymerase II transcription factor
PC207-2	140	43/46	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 158-1)
PC207-3	140	30/38	Arabidopsis thaliana	At1g16670	NP_564003	ATP binding / kinase/ protein kinase
PC208-1	112					no significant similarity found
PC208-2	112					no significant similarity found
PC208-4	112					no significant similarity found
PC208-3	103					no significant similarity found
PC209-1	68					no significant similarity found
PC209-2	69					no significant similarity found
PC209-3	69					no significant similarity found
PC209-4	69					no significant similarity found
PC211-1	174					no significant similarity found
PC211-2	168	18/24	Arabidopsis thaliana	At4g02480	NP_567238	ATP binding / ATPase/ nucleoside-triphosphatase
PC211-3	169					no significant similarity found
PC211-4	160	29/50	Arabidopsis thaliana	At1g70505	NP_683487	unknown protein (see 212-3)
PC224-1	101					no significant similarity found
PC224-2	100					no significant similarity found
PC224-3	102	16/30	Arabidopsis thaliana	At5g26570	NP_198009	PWD (PHOSPHOGLUCAN WATER DIKINASE)
PC224-4	100					no significant similarity found
PC225-1	72					no significant similarity found
PC225-3	73					no significant similarity found
PC225-4	72					no significant similarity found
PC225-2	81	20/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 249-2)
PC232-1	145	38/47	Arabidopsis thaliana	At2g20370	NP_179627	MUR3 (MURUS 3)

PC232-2	137	13/18	Fragaria x ananassa		AF193789	alcohol acyltransferase
PC232-3	141					no significant similarity found
PC232-4	139					no significant similarity found
PC249-1	81	19/25	Arabidopsis thaliana	At1g03440	NP_563685	protein binding
PC249-3	81	19/25	Arabidopsis thaliana	At1g03440	NP_563685	protein binding
PC249-2	81	21/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 225-2)
PC249-4	81	21/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 225-2)

Zusätzliche Informationen zur Dissertation von Yvonne Gäßler, 2007

Tabelle 7-7: Liste von Genen, deren Expression durch HrpZ_{Psp}-Behandlung nach 1 h induziert wird.

cDNA-AFLP-Analyse in Petersilie, Fragmente pc1-pc250.

Farblich unterlegt sind jeweils die Gene, deren Expression sowohl nach einer als auch nach vier Stunden (hellgrün) erhöht war; die Fragmente, die in die nähere Auswahl kamen (hautfarben) sowie Gene aus Petersilie, deren Induzierbarkeit schon bekannt ist (gelb).

Klon	Länge [bp]	BlastX [AS/AS]	Organismus	AGI Code	Accession-nummer	Protein/Mögliche Funktion
PC69-1	106	14/25	Strongylocentrotus purpuratus		XP_795243	PREDICTED: similar to UPF2 regulator of nonsense transcripts homolog, partial
PC69-2	179	36/57	Solanum demissum		AAT38758	putative gag-pol polyprotein
PC69-3	179	36/57	Solanum demissum		AAT38758	putative gag-pol polyprotein
PC69-4	181					no significant similarity found
PC78-1	164					no significant similarity found
PC78-2	175					no significant similarity found
PC78-3	164					no significant similarity found
PC78-4	202					no significant similarity found
PC143-3	454	29/58	Mentha x piperita		AAQ75423	(+)-pulegone reductase
PC245-3	419	104/139	Centella asiatica		AAS01523	putative beta-amyrin synthase (see 215-1)
PC245-4	419	104/139	Centella asiatica		AAS01523	putative beta-amyrin synthase (see 215-1)

Zusätzliche Informationen zur Dissertation von Yvonne Gäbler, 2007

Tabelle 7-11: Liste von Genen, deren Expression durch Pep13 und HrpZ_{Pspb}-Behandlung nach 4 h induziert wird.

cDNA-AFLP-Analyse in Petersilie, Fragmente pc1-pc251.

Farblich unterlegt sind jeweils die Gene, deren Expression sowohl nach einer als auch nach vier Stunden (hellgrün) erhöht war; die Fragmente, die in die nähere Auswahl kamen (hautfarben) sowie Gene aus Petersilie, deren Induzierbarkeit schon bekannt ist (gelb).

Klon	Länge [bp]	BlastX [AS/AS]	Organismus	AGI Code	Accession-nummer	Protein/Mögliche Funktion
PC2-1	155	14/33	Potato virus Y		ABC70481	polyprotein
PC2-2	156	14/33	Potato virus Y		ABC70481	polyprotein
PC5-1	81	26/26	Pisum sativum		BAB33421	putative senescence-associated protein
PC5-2	81	26/26	Pisum sativum		BAB33421	putative senescence-associated protein
PC5-3	87					no significant similarity found
PC5-4	87					no significant similarity found
PC10-1	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 25)
PC10-2	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 25)
PC10-4	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 25)
PC10-3	123	39/40	Arabidopsis thaliana	At3g12580	NP_187864	HSP70; ATP binding (see 21-1)
PC12	102	18/20	Arabidopsis thaliana	At1g05170	NP_172009	transferase, transferring glycosyl groups (see 43-3)
PC16	<138					no significant similarity found
PC17-1	123					no significant similarity found
PC17-4	123					no significant similarity found
PC17-2	121					no significant similarity found
PC17-3	118	14/18	Arabidopsis thaliana	At1g79630	NP_178081	catalytic/ protein phosphatase type 2C
PC22-1	151					no significant similarity found
PC25-1	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-2	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-3	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-4	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC27-1	125					no significant similarity found
PC27-2	111					no significant similarity found
PC27-3	71					no significant similarity found

PC27-4	123	32/40	Arabidopsis thaliana	At5g41460	NP_198961	transferase, transferring glycosyl groups
PC33-1	44					no significant similarity found
PC33-2	44					no significant similarity found
PC33-3	44					no significant similarity found
PC33-4	44					no significant similarity found
PC37-1	61					no significant similarity found
PC37-2	64					no significant similarity found
PC37-3	67					no significant similarity found
PC37-4	67					no significant similarity found
PC38-1	59	16/19	Arabidopsis thaliana	At3g56460	NP_191205	oxidoreductase/ zinc ion binding
PC38-2	60					no significant similarity found
PC38-4	41					no significant similarity found
PC40-2	35					no significant similarity found
PC40-3	35					no significant similarity found
PC40-4	35					no significant similarity found
PC45-1	104	26/34	Arabidopsis thaliana	At3g30390	NP_566854	amino acid permease
PC45-4	103					no significant similarity found
PC47-1	36					no significant similarity found
PC47-2	35					no significant similarity found
PC48-1	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-2	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-3	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-4	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC49-4	102	31/33	Arabidopsis thaliana	At3g54190	NP_566994	unknown protein
PC50-1	70					no significant similarity found
PC50-2	73					no significant similarity found
PC51-3	63					no significant similarity found
PC51-4	59					no significant similarity found
PC52-1	54					no significant similarity found
PC52-2	54					no significant similarity found
PC52-3	54					no significant similarity found
PC52-4	54					no significant similarity found
PC53-1	54					no significant similarity found
PC53-2	54					no significant similarity found
PC53-3	54					no significant similarity found
PC53-4	54					no significant similarity found

PC54-1	54					no significant similarity found
PC54-2	54					no significant similarity found
PC54-3	54					no significant similarity found
PC54-4	54					no significant similarity found
PC66-1	57					no significant similarity found
PC66-2	55					no significant similarity found
PC66-3	51					no significant similarity found
PC66-4	57					no significant similarity found
PC69-1	106	14/25	Strongylocentrotus purpuratus		XP_795243	PREDICTED: similar to UPF2 regulator of nonsense transcripts homolog
PC69-2	179	36/57	Solanum demissum		AAT38758	putative gag-pol polyprotein
PC69-3	179	36/57	Solanum demissum		AAT38758	putative gag-pol polyprotein
PC69-4	181					no significant similarity found
PC72-1	78					no significant similarity found
PC73-3	77					no significant similarity found
PC73-4	77					no significant similarity found
PC74-1	78					no significant similarity found
PC74-2	79	19/22	Arabidopsis thaliana	At3g22200	NP_566700	POP2 (POLLEN-PISTIL INCOMPATIBILITY 2)
PC74-3	78					no significant similarity found
PC74-4	54					no significant similarity found
PC75-1	54					no significant similarity found
PC75-2	57					no significant similarity found
PC75-4	78					no significant similarity found
PC79-1	105					no significant similarity found
PC79-2	105					no significant similarity found
PC79-3	105					no significant similarity found
PC79-4	105					no significant similarity found
PC81-1	23					no significant similarity found
PC81-2	119					no significant similarity found
PC81-3	118					no significant similarity found
PC81-4	134					no significant similarity found
PC88-1-1	161	25/52	Arabidopsis thaliana	At2g29110	NP_180475	ATGLR2.8 (see 252-1)
PC88-1-2	275	48/91	Arabidopsis thaliana	At5g07860	NP_196403	transferase
PC88-2-1	343	38/61	Arabidopsis thaliana	At4g24310	NP_194162	unknown protein
PC88-2-2	91					no significant similarity found
PC88-2-3	56					no significant similarity found
PC88-3-1	26					no significant similarity found

PC88-3-3	26					no significant similarity found
PC97-1	29					no significant similarity found
PC97-2	26					no significant similarity found
PC97-3	26					no significant similarity found
PC97-4	26					no significant similarity found
PC107-1-1	295	95/98	Petroselinum crispum		Q43033	trans-cinnamate 4 monooxygenase (C4H)
PC107-1-2	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 670-2-3)
PC107-1-3	287	35/62	Arabidopsis thaliana	At5g36970	NP_198513	NHL25 (NDR1/HIN1-LIKE 25)
PC107-1-4	292	49/62	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 108-1-2)
PC107-2-1	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-2	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-3	161	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-4	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-1-1	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-1-2	291	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC108-1-4	291	48/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC108-1-3	27					no significant similarity found
PC108-2-1	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-2-2	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-2-3	135	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-2-4	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC115-1	297	34/62	Arabidopsis thaliana	At5g35690	NP_198419	unknown protein
PC115-4	297	34/62	Arabidopsis thaliana	At5g35690	NP_198419	unknown protein
PC115-2	65					no significant similarity found
PC115-3	297	34/64	Daucus carota		BAB68539	(S)-reticuline oxidase-like protein (see 397-1)
PC116-1	288	42/42	Arabidopsis thaliana	At4g38510	AAL90995	similar to vacuolar ATP-synthase subunit B isoform
PC116-2	14					no significant similarity found
PC116-4	14					no significant similarity found
PC116-3	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC120-1	187	45/61	Euphorbia esula		AF227622	60S acidic ribosomal protein PO
PC120-2	18					no significant similarity found
PC120-4	286	60/63	Arabidopsis thaliana	At5g20160	NP_197516	RNA binding / structural constituent of ribosome
PC125-1	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-2	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-3	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-4	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase

PC129-1	264	59/87	Daucus carota		BAA03455	protein AX1108-carrot (embryogenesis-associated protein)
PC129-2	289	21/77	Apis mellifera		XP_623643	PREDICTED: similar to CG30266-PA isoform 2
PC129-4	288					no significant similarity found
PC129-3	34					no significant similarity found
PC130-1	279	21/49	Arabidopsis thaliana	At2g40370	NP_181568	copper ion binding
PC130-2	70					no significant similarity found
PC131-1	218	49/71	Arabidopsis thaliana	At2g48110	NP_566125	unknown protein
PC131-2	175	55/58	Arabidopsis thaliana	At5g51570	NP_199970	unknown protein
PC131-3	216	29/50	Glycine max		AAD02075	subtilisin-like protease C1 (see 235)
PC131-4	168	15/17	Vigna mungo		BAA92495	Cysteine protease (see 70-3)
PC132-1	96					no significant similarity found
PC132-2	97	13/20	Arabidopsis thaliana	At1g14540	NP_172906	anionic peroxidase, putative
PC132-4	77					no significant similarity found
PC137-1	291	29/44	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-3	291	32/51	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-4	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-2	288	46/68	Arabidopsis thaliana	At5g19000	NP_197401	ATBPM1
PC142-1	93	26/30	Arabidopsis thaliana	At1g09210	NP_172392	calcium ion binding
PC142-3	93	26/30	Arabidopsis thaliana	At1g09210	NP_172392	calcium ion binding
PC142-2	87	20/28	Arabidopsis thaliana	At1g62440	NP_176434	LRX2 (LEUCINE-RICH REPEAT/EXTENSIN 2)
PC142-4	87	20/28	Arabidopsis thaliana	At1g62440	NP_176434	LRX2 (LEUCINE-RICH REPEAT/EXTENSIN 2)
PC150-2	31					no significant similarity found
PC150-3	259	36/48	Arabidopsis thaliana	At2g47590	NP_182281	PHR2 (PHOTOLYASE/BLUE-LIGHT RECEPTOR 2)
PC150-4	400	47/67	Daucus carota		AAB71693	Glutamine synthetase, chloroplast precursor, GS2
PC152-1	296	91/98	Arabidopsis thaliana	At3g24090	NP_189051	glutamine-fructose-6-phosphate transaminase (isomerizing)
PC152-3	296	40/52	Arabidopsis thaliana	At1g16720	NP_173116	oxidoreductase
PC152-4	87	15/26	Schistosoma japonicum		AAQ16109	elongation factor 1-alpha
PC154-1	88					no significant similarity found
PC154-3	88					no significant similarity found
PC154-2	94					no significant similarity found
PC154-4	77	17/18	Arabidopsis thaliana	At5g09590	NP_196521	mtHSC70-2 (HEAT SHOCK PROTEIN 70)
PC158-1	247	44/47	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 206-3)
PC158-4	247	44/47	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 206-3)
PC158-3	234					no significant similarity found
PC196-1	152					no significant similarity found
PC196-2	349	52/86	Arabidopsis thaliana	At3g52450	NP_190813	ubiquitin-protein ligase

PC196-3	350	52/86	Arabidopsis thaliana	At3g52450	NP_190813	ubiquitin-protein ligase
PC196-4	117					no significant similarity found
PC197-2	378	42/60	Arabidopsis thaliana	At5g56010	NP_200412	HSP81-3
PC197-4	373	14/15	Petroselinum crispum		AF239832	Eli7.7, andere Eli7 (see 287-4)
PC197-5	364	33/82	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC198-1	238	15/49	Dictyostelium discoideum		XP_644078	component of 9-1-1 complex
PC198-2	237	72/78	Arabidopsis thaliana	At5g40540	NP_198870	ATP binding / kinase/ protein kinase (see 228-4)
PC198-4	245	35/86	Arabidopsis thaliana	At4g38250	NP_195538	amino acid permease/ amino acid transporter
PC210-1	141	14/33	Pseudoalteromonas tunicata D2		ZP_01136035	hypothetical protein PTD2_09632
PC210-2	324	27/46	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 417-1)
PC210-3	235	27/46	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 417-1)
PC210-4	225	37/39	Daucus carota		CAA33476	14 KD proline-rich protein DC2.15 precursor
PC211-1	174					no significant similarity found
PC211-2	168	18/24	Arabidopsis thaliana	At4g02480	NP_567238	ATP binding / ATPase/ nucleoside-triphosphatase
PC211-3	169					no significant similarity found
PC211-4	160	29/50	Arabidopsis thaliana	At1g70505	NP_683487	unknown protein (see 212-3)
PC212-1	168					no significant similarity found
PC212-2	99					no significant similarity found
PC212-3	160	29/50	Arabidopsis thaliana	At1g70505	NP_683487	unknown protein (see 211-4)
PC217-1	242	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2 & 210-2)
PC217-2	252	32/71	Verbena x hybrida		AAS77403	quercetin 3-O-glucoside-6"-O-malonyltransferase
PC217-3	250	49/61	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC217-4	244	40/40	Petroselinum crispum		AAA33861	Tyrosin-Decarboxylase (see 312-1)
PC228-1	72	16/24	Arabidopsis thaliana	At1g72680	NP_177412	putative cinnamyl-alcohol dehydrogenase (see 580-1)
PC228-2	235	75/77	Arabidopsis thaliana	At5g26751	NP_568486	ATSK11
PC228-3	202	14/34	Roseiflexus sp. RS-1		ZP_01355879	hypothetical protein RoseRSDRAFT_4270
PC228-4	237	51/54	Arabidopsis thaliana	At5g40540	NP_198870	ATP binding / kinase/ protein kinase (see 198-2)
PC240-2	281	74/74	Petroselinum crispum		CAA34715	Phenylalanine ammonia-lyase 1 (see 690-1)
PC240-3	280	66/92	Arabidopsis thaliana	At4g34100	NP_195136	protein binding / ubiquitin-protein ligase/ zinc ion binding
PC240-4	277	49/57	Arabidopsis thaliana	At5g14760	NP_568304	L-aspartate oxidase/ disulfide oxidoreductase/ oxidoreductase
PC240-5	277	49/57	Arabidopsis thaliana	At5g14760	NP_568304	L-aspartate oxidase/ disulfide oxidoreductase/ oxidoreductase
PC241-1	235	31/79	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC241-2	279	21/29	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2 & 210-2)
PC241-4	265	41/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2 & 210-2)
PC246-1	196	51/60	Arabidopsis thaliana	At3g61510	NP_191710	ACS1 (ACC SYNTHASE 1) (see 220-3)
PC246-2	174	50/58	Arabidopsis thaliana	At3g61510	NP_191710	ACS1 (ACC SYNTHASE 1) (see 220-3)

PC246-3	230	17/31	Arabidopsis thaliana	At3g53990	NP_566991	unknown protein
PC246-4	155	48/51	Arabidopsis thaliana	At1g65430	NP_176722	ubiquitin-protein ligase/ zinc ion binding (see 247-3)
PC249-1	81	19/25	Arabidopsis thaliana	At1g03440	NP_563685	protein binding
PC249-3	81	19/25	Arabidopsis thaliana	At1g03440	NP_563685	protein binding
PC249-2	81	21/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 225-2)
PC249-4	81	21/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 225-2)

Zusätzliche Informationen zur Dissertation von Yvonne Gäbler, 2007

Tabelle 7-8: Liste von Genen, deren Expression durch Pep13 und HrpZ_{Psp}-Behandlung nach 1 h induziert wird.
cDNA-AFLP-Analyse in Petersilie, Fragmente pc1-pc251.

Farblich unterlegt sind jeweils die Gene, deren Expression sowohl nach einer als auch nach vier Stunden (hellgrün) erhöht war; die Fragmente, die in die nähere Auswahl kamen (hautfarben) sowie Gene aus Petersilie, deren Induzierbarkeit schon bekannt ist (gelb).

Klon	Länge [bp]	BlastX [AS/AS]	Organismus	AGI Code	Accession-nummer	Protein/Mögliche Funktion
PC16	<138					no significant similarity found
PC17-1	123					no significant similarity found
PC17-4	123					no significant similarity found
PC17-2	121					no significant similarity found
PC17-3	118	14/18	Arabidopsis thaliana	At1g79630	NP_178081	catalytic/ protein phosphatase type 2C
PC25-1	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-2	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-3	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-4	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC27-1	125					no significant similarity found
PC27-2	111					no significant similarity found
PC27-3	71					no significant similarity found
PC27-4	123	32/40	Arabidopsis thaliana	At5g41460	NP_198961	transferase, transferring glycosyl groups
PC34	155	18/19	Arabidopsis thaliana	At3g12580	NP_187864	HSP70; ATP binding
PC37-1	61					no significant similarity found
PC37-2	64					no significant similarity found
PC37-3	67					no significant similarity found
PC37-4	67					no significant similarity found
PC38-1	59	16/19	Arabidopsis thaliana	At3g56460	NP_191205	oxidoreductase/ zinc ion binding
PC38-2	60					no significant similarity found
PC38-4	41					no significant similarity found
PC39-1	54					no significant similarity found
PC39-2	60					no significant similarity found

PC39-3	60					no significant similarity found
PC39-4	60					no significant similarity found
PC40-2	35					no significant similarity found
PC40-3	35					no significant similarity found
PC40-4	35					no significant similarity found
PC41-1	27					no significant similarity found
PC41-2	27					no significant similarity found
PC41-3	27					no significant similarity found
PC41-4	27					no significant similarity found
PC44-1	27					no significant similarity found
PC44-2	120	20/36	Arabidopsis thaliana	At4g01400	NP_192049	unknown protein
PC44-3	111	25/36	Arabidopsis thaliana	At3g43220	NP_189908	phosphoinositide 5-phosphatase (see 36-2)
PC44-4	111	25/36	Arabidopsis thaliana	At3g43220	NP_189908	phosphoinositide 5-phosphatase (see 36-2)
PC45-1	104	26/34	Arabidopsis thaliana	At3g30390	NP_566854	amino acid permease
PC45-4	103					no significant similarity found
PC47-1	36					no significant similarity found
PC47-2	35					no significant similarity found
PC48-1	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-2	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-3	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-4	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC49-4	102	31/33	Arabidopsis thaliana	At3g54190	NP_566994	unknown protein
PC50-1	70					no significant similarity found
PC50-2	73					no significant similarity found
PC51-3	63					no significant similarity found
PC51-4	59					no significant similarity found
PC52-1	54					no significant similarity found
PC52-2	54					no significant similarity found
PC52-3	54					no significant similarity found
PC52-4	54					no significant similarity found
PC53-1	54					no significant similarity found
PC53-2	54					no significant similarity found
PC53-3	54					no significant similarity found
PC53-4	54					no significant similarity found
PC54-1	54					no significant similarity found
PC54-2	54					no significant similarity found

PC54-3	54					no significant similarity found
PC54-4	54					no significant similarity found
PC62-1	172					no significant similarity found
PC62-2	142					no significant similarity found
PC62-3	172					no significant similarity found
PC62-4	172					no significant similarity found
PC64-1	253					no significant similarity found
PC64-2	252					no significant similarity found
PC64-3	252					no significant similarity found
PC64-4	250	25/77	Rattus norvegicus		XP_226468	PREDICTED: similar to hydrocephalus-inducing protein
PC66-1	57					no significant similarity found
PC66-2	55					no significant similarity found
PC66-3	51					no significant similarity found
PC66-4	57					no significant similarity found
PC67-1	129					no significant similarity found
PC67-2	129					no significant similarity found
PC67-3	129					no significant similarity found
PC67-4	129					no significant similarity found
PC72-1	78					no significant similarity found
PC73-3	77					no significant similarity found
PC73-4	77					no significant similarity found
PC74-1	78					no significant similarity found
PC74-2	79	19/22	Arabidopsis thaliana	At3g22200	NP_566700	POP2 (POLLEN-PISTIL INCOMPATIBILITY 2)
PC74-3	78					no significant similarity found
PC74-4	54					no significant similarity found
PC75-1	54					no significant similarity found
PC75-2	57					no significant similarity found
PC75-4	78					no significant similarity found
PC79-1	105					no significant similarity found
PC79-2	105					no significant similarity found
PC79-3	105					no significant similarity found
PC79-4	105					no significant similarity found
PC81-1	23					no significant similarity found
PC81-2	119					no significant similarity found
PC81-3	118					no significant similarity found
PC81-4	134					no significant similarity found

PC82-1	92					no significant similarity found
PC82-2	91					no significant similarity found
PC82-3	91					no significant similarity found
PC82-4	92					no significant similarity found
PC88-1-1	161	25/52	Arabidopsis thaliana	At2g29110	NP_180475	ATGLR2.8 (see 252-1)
PC88-1-2	275	48/91	Arabidopsis thaliana	At5g07860	NP_196403	transferase
PC88-2-1	343	38/61	Arabidopsis thaliana	At4g24310	NP_194162	unknown protein
PC88-2-2	91					no significant similarity found
PC88-2-3	56					no significant similarity found
PC88-3-1	26					no significant similarity found
PC88-3-3	26					no significant similarity found
PC92-1	160	21/47	Arabidopsis thaliana	At2g29110	NP_180475	ATGLR2.8 (see 88-1-1)
PC92-2	206	42/68	Arabidopsis thaliana	At2g01670	NP_565273	hydrolase (see 90-3)
PC94-2	-					no significant similarity found
PC94-3	-					no significant similarity found
PC94-4	-					no significant similarity found
PC107-1-1	295	95/98	Petroselinum crispum		Q43033	trans-cinnamate 4 monooxygenase (C4H)
PC107-1-2	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 670-2-3)
PC107-1-3	287	35/62	Arabidopsis thaliana	At5g36970	NP_198513	NHL25 (NDR1/HIN1-LIKE 25)
PC107-1-4	292	49/62	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 108-1-2)
PC107-2-1	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-2	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-3	161	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-4	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC115-1	297	34/62	Arabidopsis thaliana	At5g35690	NP_198419	unknown protein
PC115-4	297	34/62	Arabidopsis thaliana	At5g35690	NP_198419	unknown protein
PC115-2	65					no significant similarity found
PC115-3	297	34/64	Daucus carota		BAB68539	(S)-reticuline oxidase-like protein (see 397-1)
PC116-1	288	42/42	Arabidopsis thaliana	At4g38510	AAL90995	similar to vacuolar ATP-synthase subunit B isoform
PC116-2	14					no significant similarity found
PC116-4	14					no significant similarity found
PC116-3	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC119-1	46					no significant similarity found
PC119-2	46					no significant similarity found
PC119-3	46					no significant similarity found
PC119-4	46					no significant similarity found

PC120-1	187	45/61	Euphorbia esula		AF227622	60S acidic ribosomal protein PO no significant similarity found
PC120-2	18					
PC120-4	286	60/63	Arabidopsis thaliana	At5g20160	NP_197516	RNA binding / structural constituent of ribosome
PC125-1	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-2	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-3	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-4	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC129-1	264	59/87	Daucus carota		BAA03455	protein AX1108-carrot (embryogenesis-associated protein)
PC129-2	289	21/77	Apis mellifera		XP_623643	PREDICTED: similar to CG30266-PA isoform 2
PC129-4	288					no significant similarity found
PC129-3	34					no significant similarity found
PC130-1	279	21/49	Arabidopsis thaliana	At2g40370	NP_181568	copper ion binding
PC130-2	70					no significant similarity found
PC131-1	218	49/71	Arabidopsis thaliana	At2g48110	NP_566125	unknown protein
PC131-2	175	55/58	Arabidopsis thaliana	At5g51570	NP_199970	unknown protein
PC131-3	216	29/50	Glycine max		AAD02075	subtilisin-like protease C1 (see 235)
PC131-4	168	15/17	Vigna mungo		BAA92495	Cysteine protease (see 70-3)
PC132-1	96					no significant similarity found
PC132-2	97	13/20	Arabidopsis thaliana	At1g14540	NP_172906	anionic peroxidase, putative
PC132-4	77					no significant similarity found
PC134-1	91					no significant similarity found
PC134-2	92	23/24	Daucus carota		CAA76056	sucrose synthase isoform I
PC134-3	93	16/28	Arabidopsis thaliana	At2g36110	NP_181155	ATTIM44-2
PC134-4	65	18/21	Arabidopsis thaliana	At3g57420	NP_191301	unknown protein
PC137-1	291	29/44	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-3	291	32/51	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-4	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-2	288	46/68	Arabidopsis thaliana	At5g19000	NP_197401	ATBPM1
PC139-1	283	72/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 138-1)
PC139-2	97	16/30	Arabidopsis thaliana	At2g27660	NP_180334	unknown protein (see 138-2)
PC139-3	217	28/65	Arabidopsis thaliana	At3g04690	NP_187120	ATP binding / kinase/ protein kinase
PC140-1	283	72/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 139-1)
PC140-2	282	72/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 139-1)
PC140-3	274	63/71	Petroselinum crispum		P19418	pathogenesis-related protein PR1-3 (PR1)
PC140-4	97	16/30	Arabidopsis thaliana	At2g27660	NP_180334	unknown protein (see 138-2)
PC145-1	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)

PC145-4	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC145-2	310	59/101	Arabidopsis thaliana	At1g03870	NP_563692	FLA9 (fasciclin-like arabinogalactan-protein 9)
PC145-3	377	35/50	Arabidopsis thaliana	At5g06060	NP_196225	oxidoreductase (see 144-1)
PC150-2	31					no significant similarity found
PC150-3	259	36/48	Arabidopsis thaliana	At2g47590	NP_182281	PHR2 (PHOTOLYASE/BLUE-LIGHT RECEPTOR 2)
PC150-4	400	47/67	Daucus carota		AAB71693	Glutamine synthetase, chloroplast precursor, GS2
PC152-1	296	91/98	Arabidopsis thaliana	At3g24090	NP_189051	glutamine-fructose-6-phosphate transaminase (isomerizing)
PC152-3	296	40/52	Arabidopsis thaliana	At1g16720	NP_173116	oxidoreductase
PC152-4	87	15/26	Schistosoma japonicum		AAQ16109	elongation factor 1-alpha
PC154-1	88					no significant similarity found
PC154-3	88					no significant similarity found
PC154-2	94					no significant similarity found
PC154-4	77	17/18	Arabidopsis thaliana	At5g09590	NP_196521	mtHSC70-2 (HEAT SHOCK PROTEIN 70)
PC158-1	247	44/47	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 206-3)
PC158-4	247	44/47	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 206-3)
PC158-3	234					no significant similarity found
PC177-1	233	49/62	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC177-2	141	16/21	Arabidopsis thaliana		CAA67588	70 kD heatshockprotein (see 182-2)
PC177-3	209	42/69	Arabidopsis thaliana	At2g35930	NP_181137	ubiquitin-protein ligase (see 388-3)
PC177-4	216	69/71	Petroselinum crispum		CAA34715	Phenylalanine ammonia-lyase 1 (see 596-2)
PC195-1	409	102/133	Arabidopsis thaliana	At2g38110	NP_181346	ATGPAT6/GPAT6; 1-acylglycerol-3-phosphate O-acyltransferase (see 797-2)
PC195-2	406	88/122	Arabidopsis thaliana	At2g38110	NP_181346	ATGPAT6/GPAT6; 1-acylglycerol-3-phosphate O-acyltransferase (see 797-2)
PC195-4	174	17/48	Papaver somniferum		AAX56304	S-norcoclaurine synthase 2
PC196-1	152					no significant similarity found
PC196-2	349	52/86	Arabidopsis thaliana	At3g52450	NP_190813	ubiquitin-protein ligase
PC196-3	350	52/86	Arabidopsis thaliana	At3g52450	NP_190813	ubiquitin-protein ligase
PC196-4	117					no significant similarity found
PC197-2	378	42/60	Arabidopsis thaliana	At5g56010	NP_200412	HSP81-3
PC197-4	373	14/15	Petroselinum crispum		AF239832	Eli7.7, andere Eli7 (see 287-4)
PC197-5	364	33/82	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC198-1	238	15/49	Dictyostelium discoideum		XP_644078	component of 9-1-1 complex
PC198-2	237	72/78	Arabidopsis thaliana	At5g40540	NP_198870	ATP binding / kinase/ protein kinase (see 228-4)
PC198-4	245	35/86	Arabidopsis thaliana	At4g38250	NP_195538	amino acid permease/ amino acid transporter
PC203-1	58					no significant similarity found
PC203-3	56					no significant similarity found
PC203-4	56					no significant similarity found

PC204-1	49					no significant similarity found
PC204-2	49					no significant similarity found
PC204-3	49					no significant similarity found
PC204-4	49					no significant similarity found
PC228-1	72	16/24	Arabidopsis thaliana	At1g72680	NP_177412	putative cinnamyl-alcohol dehydrogenase (see 580-1)
PC228-2	235	75/77	Arabidopsis thaliana	At5g26751	NP_568486	ATSK11
PC228-3	202	14/34	Roseiflexus sp. RS-1		ZP_01355879	hypothetical protein RoseRSDRAFT_4270
PC228-4	237	51/54	Arabidopsis thaliana	At5g40540	NP_198870	ATP binding / kinase/ protein kinase (see 198-2)
PC239-1	315	15/27	Arabidopsis thaliana	At1g50600	NP_175475	transcription factor
PC239-2	336	56/68	Arabidopsis thaliana	At5g47910	NP_199602	RBOHD (RESPIRATORY BURST OXIDASE PROTEIN D)
PC239-4	336	56/68	Arabidopsis thaliana	At5g47910	NP_199602	RBOHD (RESPIRATORY BURST OXIDASE PROTEIN D)
PC239-3	356	73/103	Arabidopsis thaliana	At3g52370	NP_190805	unknown protein
PC243-1	164	45/54	Arabidopsis thaliana	At5g45670	NP_199379	carboxylic ester hydrolase/ hydrolase, acting on ester bonds
PC243-2	160	14/17	Petroselinum crispum		AAK69402	immediate-early fungal elicitor protein CMPG1, Eli17 (see 334-4)
PC243-3	235	30/79	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC248-2	142					no significant similarity found
PC248-4	136					no significant similarity found
PC248-3	77					no significant similarity found

Zusätzliche Informationen zur Dissertation von Yvonne Gäßler, 2007

Tabelle 7-9: Liste von Genen, deren Expression durch Pep13-Behandlung nach 4 h induziert wird.

cDNA-AFLP-Analyse in Petersilie, Fragmente pc1-pc251.

Farblich unterlegt sind jeweils die Gene, deren Expression sowohl nach einer als auch nach vier Stunden (hellgrün) erhöht war; die Fragmente, die in die nähere Auswahl kamen (hautfarben) sowie Gene aus Petersilie, deren Induzierbarkeit schon bekannt ist (gelb).

Klon	Länge [bp]	BlastX [AS/AS]	Organismus	AGI Code	Accession-nummer	Protein/Mögliche Funktion
PC20-3	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 10)
PC20-4	177	18/32	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 8)
PC31-1	71					no significant similarity found
PC31-2	71					no significant similarity found
PC31-3	71					no significant similarity found
PC31-4	71					no significant similarity found
PC39-1	54					no significant similarity found
PC39-2	60					no significant similarity found
PC39-3	60					no significant similarity found
PC39-4	60					no significant similarity found
PC41-1	27					no significant similarity found
PC41-2	27					no significant similarity found
PC41-3	27					no significant similarity found
PC41-4	27					no significant similarity found
PC44-2	120	20/36	Arabidopsis thaliana	At4g01400	NP_192049	unknown protein
PC44-3	111	25/36	Arabidopsis thaliana	At3g43220	NP_189908	phosphoinositide 5-phosphatase (see 36-2)
PC44-4	111	25/36	Arabidopsis thaliana	At3g43220	NP_189908	phosphoinositide 5-phosphatase (see 36-2)
PC56-1	181					no significant similarity found
PC56-4	181					no significant similarity found
PC56-2	142					no significant similarity found
PC56-3	179	24/51	Arabidopsis thaliana	At1g59960	NP_176204	oxidoreductase
PC83-2	92					no significant similarity found
PC83-3	92					no significant similarity found
PC83-4	92					no significant similarity found

PC94-2	-					no significant similarity found
PC94-3	-					no significant similarity found
PC94-4	-					no significant similarity found
PC110-1	?	39/48	Zea mays		AAB21993	polyubiquitin
PC110-2	297	21/56	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC110-3	275	23/59	Medicago truncatula		ABE80754	conserved hypothetical protein
PC110-4	143	22/32	Glycine max		CAA71517	cytochrome P450 71D8
PC126-1	292	47/78	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC126-2	281	51/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase (see 125)
PC126-3	280	51/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase (see 125)
PC126-4	292	15/33	Petunia inflata		AAQ09997	S1 self-incompatibility locus-linked pollen 3.15 protein
PC134-1	91					no significant similarity found
PC134-2	92	23/24	Daucus carota		CAA76056	sucrose synthase isoform I
PC134-3	93	16/28	Arabidopsis thaliana	At2g36110	NP_181155	ATTIM44-2
PC134-4	65	18/21	Arabidopsis thaliana	At3g57420	NP_191301	unknown protein
PC135-1	55					no significant similarity found
PC135-2	55					no significant similarity found
PC135-4	55					no significant similarity found
PC135-3	55					no significant similarity found
PC138-1	283	65/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 139-1)
PC138-2	97	16/30	Arabidopsis thaliana	At2g27660	NP_180334	unknown protein (see 139-2)
PC138-3	283	71/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 139-1)
PC138-4	283	71/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 139-1)
PC139-1	283	72/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 138-1)
PC139-2	97	16/30	Arabidopsis thaliana	At2g27660	NP_180334	unknown protein (see 138-2)
PC139-3	217	28/65	Arabidopsis thaliana	At3g04690	NP_187120	ATP binding / kinase/ protein kinase
PC140-1	283	72/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 139-1)
PC140-2	282	72/94	Arabidopsis thaliana	At2g37340	NP_973620	RSZ33 (see 139-1)
PC140-3	274	63/71	Petroselinum crispum		P19418	pathogenesis-related protein PR1-3 (PR1)
PC140-4	97	16/30	Arabidopsis thaliana	At2g27660	NP_180334	unknown protein (see 138-2)
PC143-3	454	29/58	Mentha x piperita		AAQ75423	(+)-pulegone reductase
PC145-1	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC145-4	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC145-2	310	59/101	Arabidopsis thaliana	At1g03870	NP_563692	FLA9 (fasciclin-like arabinogalactan-protein 9)
PC145-3	377	35/50	Arabidopsis thaliana	At5g06060	NP_196225	oxidoreductase (see 144-1)
PC148-1	153	22/43	Arabidopsis thaliana	At5g48620	NP_199673	ATP binding (see 147)

PC148-2	153	23/43	Arabidopsis thaliana	At5g48620	NP_199673	ATP binding (see 147)
PC148-3	153	23/43	Arabidopsis thaliana	At5g48620	NP_199673	ATP binding (see 147)
PC148-4	153	23/43	Arabidopsis thaliana	At5g48620	NP_199673	ATP binding (see 147)
PC159-1	42					no significant similarity found
PC159-2	42					no significant similarity found
PC159-3	?					no significant similarity found
PC159-4	294	53/85	Catharanthus roseus		CAF74934	zinc finger DNA-binding protein
PC167-1	315	31/80	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC167-2	322	68/105	Arabidopsis thaliana	At3g28340	NP_189474	transferase, transferring hexosyl groups
PC167-3	322	68/105	Arabidopsis thaliana	At3g28340	NP_189474	transferase, transferring hexosyl groups
PC167-4	322	68/105	Arabidopsis thaliana	At3g28340	NP_189474	transferase, transferring hexosyl groups
PC177-1	233	49/62	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC177-2	141	16/21	Medicago sativa		CAA67588	70 kD heatshockprotein (see 182-2)
PC177-3	209	42/69	Arabidopsis thaliana	At2g35930	NP_181137	ubiquitin-protein ligase (see 388-3)
PC177-4	216	69/71	Petroselinum crispum		CAA34715	Phenylalanine ammonia-lyase 1 (see 596-2)
PC180-1	217	55/71	Arabidopsis thaliana	At1g26850	NP_564265	unknown protein
PC180-2	171	17/39	Arabidopsis thaliana	At1g28220	NP_174143	ATPUP3 (see 345-4)
PC180-3	133	28/37	Arabidopsis thaliana	At3g51550	NP_190723	kinase
PC180-4	171	13/18	Arabidopsis thaliana	At1g22170	NP_564161	catalytic/ intramolecular transferase, phosphotransferases
PC185-1	174	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2)
PC185-2	169	47/58	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC185-3	170	47/58	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC185-4	169	47/58	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC188-1	142					no significant similarity found
PC188-2	142					no significant similarity found
PC188-4	142					no significant similarity found
PC188-3	/					no significant similarity found
PC190-1	169	47/58	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC190-2	203	53/67	Arabidopsis thaliana	At5g56610	NP_200472	phosphoprotein phosphatase
PC190-3	105					no significant similarity found
PC190-4	174	57/57	Arabidopsis thaliana	At5g08670	NP_568203	hydrogen-exporting ATPase
PC191-1	169	47/58	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC191-4	169	47/58	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein
PC191-2	171	26/26	Petroselinum crispum		TCMO_PETCR	trans-cinnamate 4 monooxygenase (C4H)
PC191-3	163	17/41	Methanococcus jannaschii		NP_247974	hypothetical protein
PC201-1	178	14/43	Papaver somniferum		AAX56076	pathogenesis-related 10 protein PR10-2

PC201-2	174	17/48	Papaver somniferum		AAX56304	S-norcoclaurine synthase 2
PC201-4	174	17/48	Papaver somniferum		AAX56304	S-norcoclaurine synthase 2
PC202-1	?	17/48	Papaver somniferum		AAX56304	S-norcoclaurine synthase 2 (BUT apo at 183)
PC202-2	154	27/45	Arabidopsis thaliana	At1g01800	NP_563635	oxidoreductase
PC202-3	156	28/48	Arabidopsis thaliana	At1g01800	NP_563635	oxidoreductase
PC202-4	156	28/48	Arabidopsis thaliana	At1g01800	NP_563635	oxidoreductase
PC203-1	58					no significant similarity found
PC203-3	56					no significant similarity found
PC203-4	56					no significant similarity found
PC204-1	49					no significant similarity found
PC204-2	49					no significant similarity found
PC204-3	49					no significant similarity found
PC204-4	49					no significant similarity found
PC215-1	419	101/139	Centella asiatica		AAS01523	putative beta-amyrin synthase (see 245-3)
PC215-2	432	37/41	Magnetospirillum gryphiswaldense		CAJ30048	hypothetical protein
PC215-3	169	45/56	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC215-4	189	40/62	Arabidopsis thaliana	At1g63770	NP_176563	membrane alanyl aminopeptidase
PC219-1	201	59/66	Arabidopsis thaliana	At3g22890	NP_188929	APS1
PC219-2	201	59/66	Arabidopsis thaliana	At3g22890	NP_188929	APS1
PC219-3	212	27/69	Arabidopsis thaliana	At4g27300	NP_194460	ATP binding / carbohydrate binding / protein kinase (see 661-2)
PC219-4	211	50/57	Arabidopsis thaliana	At3g08590	NP_187471	2,3-bisphosphoglycerate-independent phosphoglycerate mutase
PC220-1	168	28/36	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC220-2	168	28/36	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC220-3	173	32/39	Arabidopsis thaliana	At3g61510	NP_191710	ACS1 (ACC SYNTHASE 1) (see 246-1)
PC220-4	171					no significant similarity found
PC225-1	72					no significant similarity found
PC225-3	73					no significant similarity found
PC225-4	72					no significant similarity found
PC225-2	81	20/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 249-2)
PC229-1	170	13/29	Arabidopsis thaliana	At3g44100	NP_189996	unknown protein
PC229-3	170	19/40	Arabidopsis thaliana	At3g44100	NP_189996	unknown protein
PC229-2	169	13/29	Arabidopsis thaliana	At3g44100	NP_189996	unknown protein
PC229-4	168					no significant similarity found
PC233-1	91	21/25	Arabidopsis thaliana	At3g61350	NP_567112	SKIP4 (SKP1 INTERACTING PARTNER 4)
PC233-2	91	21/25	Arabidopsis thaliana	At3g61350	NP_567112	SKIP4 (SKP1 INTERACTING PARTNER 4)
PC233-3	90					no significant similarity found

PC233-4	90					no significant similarity found
PC239-1	315	15/27	Arabidopsis thaliana	At1g50600	NP_175475	transcription factor
PC239-2	336	56/68	Arabidopsis thaliana	At5g47910	NP_199602	RBOHD (RESPIRATORY BURST OXIDASE PROTEIN D)
PC239-4	336	56/68	Arabidopsis thaliana	At5g47910	NP_199602	RBOHD (RESPIRATORY BURST OXIDASE PROTEIN D)
PC239-3	356	73/103	Arabidopsis thaliana	At3g52370	NP_190805	unknown protein
PC243-1	164	45/54	Arabidopsis thaliana	At5g45670	NP_199379	carboxylic ester hydrolase/ hydrolase, acting on ester bonds
PC243-2	160	14/17	Petroselinum crispum		AAK69402	immediate-early fungal elicitor protein CMPG1, Eli17 (see 334-4)
PC243-3	235	30/79	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC245-3	419	104/139	Centella asiatica		AAS01523	putative beta-amyrin synthase (see 215-1)
PC245-4	419	104/139	Centella asiatica		AAS01523	putative beta-amyrin synthase (see 215-1)
PC247-1	120					no significant similarity found
PC247-2	174	50/58	Arabidopsis thaliana	At3g61510	NP_191710	ACS1 (ACC SYNTHASE 1) (see 220-3)
PC247-4	175	50/58	Arabidopsis thaliana	At3g61510	NP_191710	ACS1 (ACC SYNTHASE 1) (see 220-3)
PC247-3	156	49/51	Arabidopsis thaliana	At1g65430	NP_176722	ubiquitin-protein ligase/ zinc ion binding (see 246-4)
PC250-1	72	16/24	Arabidopsis thaliana	At1g72860	NP_177412	cinnamyl-alcohol dehydrogenase (CAD) (see 580-1)
PC250-2	189	29/35	Petroselinum crispum		AAB80696	omega-6 fatty acid desaturase (EC 1.14.99.-) (see 355-1)
PC250-4	189	31/43	Arabidopsis thaliana	At1g27760	NP_564294	unknown protein

Zusätzliche Informationen zur Dissertation von Yvonne Gäßler, 2007

Tabelle 7-10: Liste von Genen, deren Expression durch HrpZ_{Psp}-Behandlung nach 4 h induziert wird.

cDNA-AFLP-Analyse in Petersilie, Fragmente pc1-pc250.

Farblich unterlegt sind jeweils die Gene, deren Expression sowohl nach einer als auch nach vier Stunden (hellgrün) erhöht war; die Fragmente, die in die nähere Auswahl kamen (hautfarben) sowie Gene aus Petersilie, deren Induzierbarkeit schon bekannt ist (gelb).

Klon	Länge [bp]	BlastX [AS/AS]	Organismus	AGI Code	Accession-nummer	Protein/Mögliche Funktion
PC67-1	129					no significant similarity found
PC67-2	129					no significant similarity found
PC67-3	129					no significant similarity found
PC67-4	129					no significant similarity found
PC78-1	164					no significant similarity found
PC78-2	175					no significant similarity found
PC78-3	164					no significant similarity found
PC78-4	202					no significant similarity found

Zusätzliche Informationen zur Dissertation von Yvonne Gäßler, 2007

Tabelle 7-11: Liste von Genen, deren Expression durch Pep13 und HrpZ_{Pspb}-Behandlung nach 4 h induziert wird.

cDNA-AFLP-Analyse in Petersilie, Fragmente pc1-pc251.

Farblich unterlegt sind jeweils die Gene, deren Expression sowohl nach einer als auch nach vier Stunden (hellgrün) erhöht war; die Fragmente, die in die nähere Auswahl kamen (hautfarben) sowie Gene aus Petersilie, deren Induzierbarkeit schon bekannt ist (gelb).

Klon	Länge [bp]	BlastX [AS/AS]	Organismus	AGI Code	Accession-nummer	Protein/Mögliche Funktion
PC2-1	155	14/33	Potato virus Y		ABC70481	polyprotein
PC2-2	156	14/33	Potato virus Y		ABC70481	polyprotein
PC5-1	81	26/26	Pisum sativum		BAB33421	putative senescence-associated protein
PC5-2	81	26/26	Pisum sativum		BAB33421	putative senescence-associated protein
PC5-3	87					no significant similarity found
PC5-4	87					no significant similarity found
PC10-1	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 25)
PC10-2	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 25)
PC10-4	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 25)
PC10-3	123	39/40	Arabidopsis thaliana	At3g12580	NP_187864	HSP70; ATP binding (see 21-1)
PC12	102	18/20	Arabidopsis thaliana	At1g05170	NP_172009	transferase, transferring glycosyl groups (see 43-3)
PC16	<138					no significant similarity found
PC17-1	123					no significant similarity found
PC17-4	123					no significant similarity found
PC17-2	121					no significant similarity found
PC17-3	118	14/18	Arabidopsis thaliana	At1g79630	NP_178081	catalytic/ protein phosphatase type 2C
PC22-1	151					no significant similarity found
PC25-1	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-2	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-3	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC25-4	141	17/31	Arabidopsis thaliana	At2g39530	NP_181485	unknown protein (see 20)
PC27-1	125					no significant similarity found
PC27-2	111					no significant similarity found
PC27-3	71					no significant similarity found

PC27-4	123	32/40	Arabidopsis thaliana	At5g41460	NP_198961	transferase, transferring glycosyl groups
PC33-1	44					no significant similarity found
PC33-2	44					no significant similarity found
PC33-3	44					no significant similarity found
PC33-4	44					no significant similarity found
PC37-1	61					no significant similarity found
PC37-2	64					no significant similarity found
PC37-3	67					no significant similarity found
PC37-4	67					no significant similarity found
PC38-1	59	16/19	Arabidopsis thaliana	At3g56460	NP_191205	oxidoreductase/ zinc ion binding
PC38-2	60					no significant similarity found
PC38-4	41					no significant similarity found
PC40-2	35					no significant similarity found
PC40-3	35					no significant similarity found
PC40-4	35					no significant similarity found
PC45-1	104	26/34	Arabidopsis thaliana	At3g30390	NP_566854	amino acid permease
PC45-4	103					no significant similarity found
PC47-1	36					no significant similarity found
PC47-2	35					no significant similarity found
PC48-1	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-2	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-3	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC48-4	111	21/36	Arabidopsis thaliana	At4g02340	NP_567228	catalytic/ epoxide hydrolase/ hydrolase
PC49-4	102	31/33	Arabidopsis thaliana	At3g54190	NP_566994	unknown protein
PC50-1	70					no significant similarity found
PC50-2	73					no significant similarity found
PC51-3	63					no significant similarity found
PC51-4	59					no significant similarity found
PC52-1	54					no significant similarity found
PC52-2	54					no significant similarity found
PC52-3	54					no significant similarity found
PC52-4	54					no significant similarity found
PC53-1	54					no significant similarity found
PC53-2	54					no significant similarity found
PC53-3	54					no significant similarity found
PC53-4	54					no significant similarity found

PC54-1	54					no significant similarity found
PC54-2	54					no significant similarity found
PC54-3	54					no significant similarity found
PC54-4	54					no significant similarity found
PC66-1	57					no significant similarity found
PC66-2	55					no significant similarity found
PC66-3	51					no significant similarity found
PC66-4	57					no significant similarity found
PC69-1	106	14/25	Strongylocentrotus purpuratus		XP_795243	PREDICTED: similar to UPF2 regulator of nonsense transcripts homolog
PC69-2	179	36/57	Solanum demissum		AAT38758	putative gag-pol polyprotein
PC69-3	179	36/57	Solanum demissum		AAT38758	putative gag-pol polyprotein
PC69-4	181					no significant similarity found
PC72-1	78					no significant similarity found
PC73-3	77					no significant similarity found
PC73-4	77					no significant similarity found
PC74-1	78					no significant similarity found
PC74-2	79	19/22	Arabidopsis thaliana	At3g22200	NP_566700	POP2 (POLLEN-PISTIL INCOMPATIBILITY 2)
PC74-3	78					no significant similarity found
PC74-4	54					no significant similarity found
PC75-1	54					no significant similarity found
PC75-2	57					no significant similarity found
PC75-4	78					no significant similarity found
PC79-1	105					no significant similarity found
PC79-2	105					no significant similarity found
PC79-3	105					no significant similarity found
PC79-4	105					no significant similarity found
PC81-1	23					no significant similarity found
PC81-2	119					no significant similarity found
PC81-3	118					no significant similarity found
PC81-4	134					no significant similarity found
PC88-1-1	161	25/52	Arabidopsis thaliana	At2g29110	NP_180475	ATGLR2.8 (see 252-1)
PC88-1-2	275	48/91	Arabidopsis thaliana	At5g07860	NP_196403	transferase
PC88-2-1	343	38/61	Arabidopsis thaliana	At4g24310	NP_194162	unknown protein
PC88-2-2	91					no significant similarity found
PC88-2-3	56					no significant similarity found
PC88-3-1	26					no significant similarity found

PC88-3-3	26					no significant similarity found
PC97-1	29					no significant similarity found
PC97-2	26					no significant similarity found
PC97-3	26					no significant similarity found
PC97-4	26					no significant similarity found
PC107-1-1	295	95/98	Petroselinum crispum		Q43033	trans-cinnamate 4 monooxygenase (C4H)
PC107-1-2	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 670-2-3)
PC107-1-3	287	35/62	Arabidopsis thaliana	At5g36970	NP_198513	NHL25 (NDR1/HIN1-LIKE 25)
PC107-1-4	292	49/62	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 108-1-2)
PC107-2-1	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-2	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-3	161	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC107-2-4	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-1-1	165	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-1-2	291	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC108-1-4	291	48/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC108-1-3	27					no significant similarity found
PC108-2-1	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-2-2	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-2-3	135	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC108-2-4	164	50/52	Euphorbia esula		AAF65770	cyclophilin (see 107-1-2)
PC115-1	297	34/62	Arabidopsis thaliana	At5g35690	NP_198419	unknown protein
PC115-4	297	34/62	Arabidopsis thaliana	At5g35690	NP_198419	unknown protein
PC115-2	65					no significant similarity found
PC115-3	297	34/64	Daucus carota		BAB68539	(S)-reticuline oxidase-like protein (see 397-1)
PC116-1	288	42/42	Arabidopsis thaliana	At4g38510	AAL90995	similar to vacuolar ATP-synthase subunit B isoform
PC116-2	14					no significant similarity found
PC116-4	14					no significant similarity found
PC116-3	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC120-1	187	45/61	Euphorbia esula		AF227622	60S acidic ribosomal protein PO
PC120-2	18					no significant similarity found
PC120-4	286	60/63	Arabidopsis thaliana	At5g20160	NP_197516	RNA binding / structural constituent of ribosome
PC125-1	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-2	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-3	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase
PC125-4	281	52/72	Arabidopsis thaliana	At5g51830	NP_199996	kinase/ ribokinase

PC129-1	264	59/87	Daucus carota		BAA03455	protein AX1108-carrot (embryogenesis-associated protein)
PC129-2	289	21/77	Apis mellifera		XP_623643	PREDICTED: similar to CG30266-PA isoform 2
PC129-4	288					no significant similarity found
PC129-3	34					no significant similarity found
PC130-1	279	21/49	Arabidopsis thaliana	At2g40370	NP_181568	copper ion binding
PC130-2	70					no significant similarity found
PC131-1	218	49/71	Arabidopsis thaliana	At2g48110	NP_566125	unknown protein
PC131-2	175	55/58	Arabidopsis thaliana	At5g51570	NP_199970	unknown protein
PC131-3	216	29/50	Glycine max		AAD02075	subtilisin-like protease C1 (see 235)
PC131-4	168	15/17	Vigna mungo		BAA92495	Cysteine protease (see 70-3)
PC132-1	96					no significant similarity found
PC132-2	97	13/20	Arabidopsis thaliana	At1g14540	NP_172906	anionic peroxidase, putative
PC132-4	77					no significant similarity found
PC137-1	291	29/44	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-3	291	32/51	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-4	292	49/79	Arabidopsis thaliana	At5g05340	NP_196153	peroxidase (see 107-1-4)
PC137-2	288	46/68	Arabidopsis thaliana	At5g19000	NP_197401	ATBPM1
PC142-1	93	26/30	Arabidopsis thaliana	At1g09210	NP_172392	calcium ion binding
PC142-3	93	26/30	Arabidopsis thaliana	At1g09210	NP_172392	calcium ion binding
PC142-2	87	20/28	Arabidopsis thaliana	At1g62440	NP_176434	LRX2 (LEUCINE-RICH REPEAT/EXTENSIN 2)
PC142-4	87	20/28	Arabidopsis thaliana	At1g62440	NP_176434	LRX2 (LEUCINE-RICH REPEAT/EXTENSIN 2)
PC150-2	31					no significant similarity found
PC150-3	259	36/48	Arabidopsis thaliana	At2g47590	NP_182281	PHR2 (PHOTOLYASE/BLUE-LIGHT RECEPTOR 2)
PC150-4	400	47/67	Daucus carota		AAB71693	Glutamine synthetase, chloroplast precursor, GS2
PC152-1	296	91/98	Arabidopsis thaliana	At3g24090	NP_189051	glutamine-fructose-6-phosphate transaminase (isomerizing)
PC152-3	296	40/52	Arabidopsis thaliana	At1g16720	NP_173116	oxidoreductase
PC152-4	87	15/26	Schistosoma japonicum		AAQ16109	elongation factor 1-alpha
PC154-1	88					no significant similarity found
PC154-3	88					no significant similarity found
PC154-2	94					no significant similarity found
PC154-4	77	17/18	Arabidopsis thaliana	At5g09590	NP_196521	mtHSC70-2 (HEAT SHOCK PROTEIN 70)
PC158-1	247	44/47	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 206-3)
PC158-4	247	44/47	Arabidopsis thaliana	At5g26360	NP_198008	ATP binding / protein binding (see 206-3)
PC158-3	234					no significant similarity found
PC196-1	152					no significant similarity found
PC196-2	349	52/86	Arabidopsis thaliana	At3g52450	NP_190813	ubiquitin-protein ligase

PC196-3	350	52/86	Arabidopsis thaliana	At3g52450	NP_190813	ubiquitin-protein ligase
PC196-4	117					no significant similarity found
PC197-2	378	42/60	Arabidopsis thaliana	At5g56010	NP_200412	HSP81-3
PC197-4	373	14/15	Petroselinum crispum		AF239832	Eli7.7, andere Eli7 (see 287-4)
PC197-5	364	33/82	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC198-1	238	15/49	Dictyostelium discoideum		XP_644078	component of 9-1-1 complex
PC198-2	237	72/78	Arabidopsis thaliana	At5g40540	NP_198870	ATP binding / kinase/ protein kinase (see 228-4)
PC198-4	245	35/86	Arabidopsis thaliana	At4g38250	NP_195538	amino acid permease/ amino acid transporter
PC210-1	141	14/33	Pseudoalteromonas tunicata D2		ZP_01136035	hypothetical protein PTD2_09632
PC210-2	324	27/46	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 417-1)
PC210-3	235	27/46	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 417-1)
PC210-4	225	37/39	Daucus carota		CAA33476	14 KD proline-rich protein DC2.15 precursor
PC211-1	174					no significant similarity found
PC211-2	168	18/24	Arabidopsis thaliana	At4g02480	NP_567238	ATP binding / ATPase/ nucleoside-triphosphatase
PC211-3	169					no significant similarity found
PC211-4	160	29/50	Arabidopsis thaliana	At1g70505	NP_683487	unknown protein (see 212-3)
PC212-1	168					no significant similarity found
PC212-2	99					no significant similarity found
PC212-3	160	29/50	Arabidopsis thaliana	At1g70505	NP_683487	unknown protein (see 211-4)
PC217-1	242	42/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2 & 210-2)
PC217-2	252	32/71	Verbena x hybrida		AAS77403	quercetin 3-O-glucoside-6"-O-malonyltransferase
PC217-3	250	49/61	Arabidopsis thaliana	At2g15220	NP_565369	unknown protein (see 216-1)
PC217-4	244	40/40	Petroselinum crispum		AAA33861	Tyrosin-Decarboxylase (see 312-1)
PC228-1	72	16/24	Arabidopsis thaliana	At1g72680	NP_177412	putative cinnamyl-alcohol dehydrogenase (see 580-1)
PC228-2	235	75/77	Arabidopsis thaliana	At5g26751	NP_568486	ATSK11
PC228-3	202	14/34	Roseiflexus sp. RS-1		ZP_01355879	hypothetical protein RoseRSDRAFT_4270
PC228-4	237	51/54	Arabidopsis thaliana	At5g40540	NP_198870	ATP binding / kinase/ protein kinase (see 198-2)
PC240-2	281	74/74	Petroselinum crispum		CAA34715	Phenylalanine ammonia-lyase 1 (see 690-1)
PC240-3	280	66/92	Arabidopsis thaliana	At4g34100	NP_195136	protein binding / ubiquitin-protein ligase/ zinc ion binding
PC240-4	277	49/57	Arabidopsis thaliana	At5g14760	NP_568304	L-aspartate oxidase/ disulfide oxidoreductase/ oxidoreductase
PC240-5	277	49/57	Arabidopsis thaliana	At5g14760	NP_568304	L-aspartate oxidase/ disulfide oxidoreductase/ oxidoreductase
PC241-1	235	31/79	Arabidopsis thaliana	At2g46150	NP_182138	unknown protein (see 470-1)
PC241-2	279	21/29	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2 & 210-2)
PC241-4	265	41/56	Arabidopsis thaliana	At1g23740	NP_173786	oxidoreductase/ zinc ion binding (see 162-2 & 210-2)
PC246-1	196	51/60	Arabidopsis thaliana	At3g61510	NP_191710	ACS1 (ACC SYNTHASE 1) (see 220-3)
PC246-2	174	50/58	Arabidopsis thaliana	At3g61510	NP_191710	ACS1 (ACC SYNTHASE 1) (see 220-3)

PC246-3	230	17/31	Arabidopsis thaliana	At3g53990	NP_566991	unknown protein
PC246-4	155	48/51	Arabidopsis thaliana	At1g65430	NP_176722	ubiquitin-protein ligase/ zinc ion binding (see 247-3)
PC249-1	81	19/25	Arabidopsis thaliana	At1g03440	NP_563685	protein binding
PC249-3	81	19/25	Arabidopsis thaliana	At1g03440	NP_563685	protein binding
PC249-2	81	21/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 225-2)
PC249-4	81	21/26	Arabidopsis thaliana	At4g29500	AAM97085	X-Pro dipeptidase-like protein (see 225-2)