Supplemental Table 2. iTRAQ labeled peptides that were used for quantification of the subunits of the ClpPRS complex and the reference protein THI1. Peptides were identified by nanoLC-ESI-MS/MS.

Annotation	gene id	experiment	gel slice #	peptide sequence + modification	m/z	charge state (z)	correction factor	average r2-1/wt ratio per protein	standard deviation per protein	n
ClpP4	At5g45390	exp1 (114-r2-1/117-wt)	1	R.FAMPNTR.I + iTRAQ (N-term)	490.25	2		0.45	0.11	7
ClpP4	At5g45390	exp1 (114-r2-1/117-wt)	1	R.SFEQVLK.D + iTRAQ (K); iTRAQ (N-term)	569.81	2				
ClpP4	At5g45390	exp1 (114-r2-1/117-wt)	1	R.SFEQVLK.D + iTRAQ (K); iTRAQ (N-term)	569.81	2				
ClpP4	At5g45390	exp1 (114-r2-1/117-wt)	1	R.GAESDVMGLLLR.E + iTRAQ (N-term)	702.85	2				
ClpP4	At5g45390	exp1 (114-r2-1/117-wt)	1	R.GAESDVMGLLLR.E + iTRAQ (N-term)	702.85	2				
ClpP4	At5g45390	exp1 (114-r2-1/117-wt)	1	R.GAESDVMGLLLR.E + iTRAQ (N-term); Oxi (M)	710.85	2				
ClpP4	At5g45390	exp1 (114-r2-1/117-wt)	1	K.FLTPEIPDDEIY.- + iTRAQ (N-term)	798.38	2				
ClpR3	At1g09130	exp1 (114-r2-1/117-wt)	1	R.TPPPDLPSMLLDGR.I + iTRAQ (N-term); Oxi (M)	834.88	2		0.70	0.09	4
ClpR3	At1g09130	exp1 (114-r2-1/117-wt)	1	R.VPSSGLMPASDVLIR.A + iTRAQ (N-term)	843.42	2				
ClpR3	At1g09130	exp1 (114-r2-1/117-wt)	1	R.VPSSGLMPASDVLIR.A + iTRAQ (N-term)	843.43	2				
ClpR3	At1g09130	exp1 (114-r2-1/117-wt)	1	R.VPSSGLMPASDVLIR.A + iTRAQ (N-term); Oxi (M)	851.43	2				
ClpR1	At1g49970	exp1 (114-r2-1/117-wt)	1	R.AMRPGGGSPAAPAGLR.- + iTRAQ (N-term)	537.26	3		0.42	0.01	2
ClpR1	At1g49970	exp1 (114-r2-1/117-wt)	1	R.TAPPDLPSLLLDAR.I + iTRAQ (N-term)	811.93	2				
ClpP3	At1g66670	exp1 (114-r2-1/117-wt)	1	R.LPSFEELDTTNMLLR.Q + iTRAQ (N-term)	961.97	2		0.31	nd	1
ClpP5	At1g02560	exp1 (114-r2-1/117-wt)	2	K.ANLNGYLAYHTGQSLEK.I + iTRAQ (N-term)	675.31	3		0.31	nd	1
ClpR4	At4g17040	exp1 (114-r2-1/117-wt)	2	K.SPEQIEADMK.R + iTRAQ (N-term)	646.28	2		0.25	0.17	4
ClpR4	At4g17040	exp1 (114-r2-1/117-wt)	2	K.YFSPTEAVEYGIIDK.V + iTRAQ (N-term)	938.45	2				
ClpR4	At4g17040	exp1 (114-r2-1/117-wt)	2	K.GSAHEQPPPDLASYLFK.N + iTRAQ (N-term)	667.62	3				
ClpR4	At4g17040	exp1 (114-r2-1/117-wt)	2	K.GSAHEQPPPDLASYLFK.N + iTRAQ (N-term)	667.64	3				
ClpR2	At1g12410	exp1 (114-r2-1/117-wt)	2	R.FAMPLSR.I + iTRAQ (N-term)	483.25	2		0.19	0.05	3
ClpR2	At1g12410	exp1 (114-r2-1/117-wt)	2	R.FAMPLSR.I + iTRAQ (N-term)	483.26	2				
ClpR2	At1g12410	exp1 (114-r2-1/117-wt)	2	R.IALQSPAGAAR.G + iTRAQ (N-term)	599.83	2				
ClpP6	At1g11750	exp1 (114-r2-1/117-wt)	3	R.IIFIGQPINAQVAQR.V + iTRAQ (N-term)	906.41	2		0.61	nd	1
Clp S1	At4g25370	exp1 (114-r2-1/117-wt)	3	K.SLAMGELEAR.K + iTRAQ (N-term)	610.79	2		0.65	0.02	2
Clp S1	At4g25370	exp1 (114-r2-1/117-wt)	3	K.SLAMGELEAR.K + iTRAQ (N-term); Oxi(M)	618.80	2				
ClpP1	AtCg00670	exp1 (114-r2-1/117-wt)	3	R.SPGEGDTSWVDIYNR.L + iTRAQ (N-term)	920.38	2		0.58	0.01	2
ClpP1	AtCg00670	exp1 (114-r2-1/117-wt)	3	R.SPGEGDTSWVDIYNR.L + iTRAQ (N-term)	920.38	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.AGQLALK.A + iTRAQ (K); iTRAQ (N-term)	494.81	2		1.29	0.19	26
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.ALDMNTAEDAIVR.L + iTRAQ (N-term)	781.79	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.ALDMNTAEDAIVR.L + iTRAQ (N-term)	781.79	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.ALDMNTAEDAIVR.L + iTRAQ (N-term)	781.79	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.ALDMNTAEDAIVR.L + iTRAQ (N-term)	781.79	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.ALDMNTAEDAIVR.L + iTRAQ (N-term)	524.87	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.ALDMNTAEDAIVR.L + iTRAQ (N-term); Oxid (M)	789.85	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.HAALFTSTIMSK.L + iTRAQ (K)	725.87	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.HAALFTSTIMSK.L + iTRAQ (K); iTRAQ (N-term)	532.27	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.HAALFTSTIMSK.L + iTRAQ (K); iTRAQ (N-term)	797.92	2				

Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.HAALFTSTIMSK.L + iTRAQ (K); iTRAQ (N-term); Oxi (M)	537.61	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	845.93	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	845.98	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	564.31	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.LLARPNVK.L + iTRAQ (K); iTRAQ (N-term)	400.22	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.LLARPNVK.L + iTRAQ (K); iTRAQ (N-term)	599.88	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	K.SIGMIDHVPGMK.A + iTRAQ (K); iTRAQ (N-term); Oxi\ (M)	530.26	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.EVVPGMIVTGMEVAEIDGAPR.M + iTRAQ (N-term)	772.07	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.EVVPGMIVTGMEVAEIDGAPR.M + iTRAQ (N-term)	1157.57	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.EVVPGMIVTGMEVAEIDGAPR.M + iTRAQ (N-term)	1157.57	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.EVVPGMIVTGMEVAEIDGAPR.M + iTRAQ (N-term); Ox (M)	1165.57	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.EVVPGMIVTGMEVAEIDGAPR.M + iTRAQ (N-term); Oxi (M)	1165.56	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.EVVPGMIVTGMEVAEIDGAPR.M + iTRAQ (N-term); Oxi (M)	777.35	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.KPAHLFLDEIGVAYDEQDTYVVVK.H + 2 iTRAQ (K); iTRAQ (N-term)	1061.20	3				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.MGPTFGAMMISGQK.A + iTRAQ (K); iTRAQ (N-term); 2 Ox (M)	888.42	2				
Thi1	At5g54770	exp1 (114-r2-1/117-wt)	4	R.MGPTFGAMMISGQK.A + iTRAQ (K); iTRAQ (N-term); Oxi(M)	880.42	2				
ClpP4	AT5G45390	exp2 (117-r2-1/114-wt)	1	K.FLTPEIPDDEIY.- + iTRAQ (N-term)	798.35	2	1.46	0.52	0.20	3
ClpP4	AT5G45390	exp2 (117-r2-1/114-wt)	1	K.FLTPEIPDDEIY.- + iTRAQ (N-term)	798.43	2	1.60			
ClpP4	AT5G45390	exp2 (117-r2-1/114-wt)	1	K.NNVTSIIAGCTSR.S + iTRAQ (N-term)	768.95	2	3.30			
ClpR3	AT1G09130	exp2 (117-r2-1/114-wt)	1	K.EPIYIYINSTGTTR.D + iTRAQ (N-term)	886.42	2	1.68	0.55	0.07	2
ClpR3	AT1G09130	exp2 (117-r2-1/114-wt)	1	K.EPIYIYINSTGTTR.D + iTRAQ (N-term)	886.50	2	1.90			
ClpR1	AT1G49970	exp2 (117-r2-1/114-wt)	1	K.LYLPK.V + iTRAQ (K); iTRAQ (N-term)	461.28	2	1.31	0.57	0.22	4
ClpR1	AT1G49970	exp2 (117-r2-1/114-wt)	1	K.LYLPK.V + iTRAQ (K); iTRAQ (N-term)	461.33	2	1.31			
ClpR1	AT1G49970	exp2 (117-r2-1/114-wt)	1	R.TAPPDLPSLLLDAR.I + iTRAQ (N-term)	811.92	2	2.30			
ClpR1	AT1G49970	exp2 (117-r2-1/114-wt)	1	R.TAPPDLPSLLLDAR.I + iTRAQ (N-term)	812.00	2	2.70			
ClpP5	AT1G02560	exp2 (117-r2-1/114-wt)	2	K.ANLNGYLAYHTGQSLEK.I + iTRAQ (N-term)	675.33	3	1.40	0.67	0.04	2
ClpP5	AT1G02560	exp2 (117-r2-1/114-wt)	2	R.YSLPNSR.I + iTRAQ (N-term)	490.79	2	1.55			
ClpR2	AT1G12410	exp2 (117-r2-1/114-wt)	2	R.IALQSPAGAAR.G + iTRAQ (N-term)	599.84	2	4.70	0.20	nd	1
ClpR4	AT4G17040	exp2 (117-r2-1/114-wt)	2	R.FQGQATDVEIAR.K + iTRAQ (N-term)	739.93	2	5.39	0.18	nd	1
ClpP6	AT1G11750	exp2 (117-r2-1/114-wt)	3	R.IIFIGQPINAQVAQR.V + iTRAQ (N-term)	906.50	2	3.40	0.34	0.08	2
ClpP6	AT1G11750	exp2 (117-r2-1/114-wt)	3	R.IIFIGQPINAQVAQR.V + iTRAQ (N-term)	604.68	3	2.46			
ClpP1	ATCG00670	exp2 (117-r2-1/114-wt)	3	R.SPGEGDTSWVDIYNR.L + iTRAQ (N-term)	920.41	2	3.50	0.21	0.10	2
ClpP1	ATCG00670	exp2 (117-r2-1/114-wt)	3	R.SPGEGDTSWVDIYNR.L + iTRAQ (N-term)	920.41	2	7.17			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.AGQLALK.A + iTRAQ (K); iTRAQ (N-term)	494.82	2	0.63	1.59	0.22	15
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.AGQLALK.A + iTRAQ (K); iTRAQ (N-term)	494.82	2	0.91			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.IVVSSCGHDGPFGATGVK.R + iTRAQ (K); iTRAQ (N-term)	692.70	3	0.75			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.IVVSSCGHDGPFGATGVK.R + iTRAQ (K); iTRAQ (N-term)	692.70	3	0.67			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	845.99	2	0.63			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	845.97	2	0.59			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	845.99	2	0.64			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	845.99	2	0.69			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	845.99	2	0.59			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	564.33	3	0.59			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	564.33	3	0.52			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)	564.33	3	0.63			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	K.LFNAVAAEDLIVK.G + iTRAQ (K); iTRAQ (N-term)l	845.99	2	0.59			
Thi1	AT5G54770	exp2 (117-r2-1/114-wt)	4	R.ATTAGYDLNAFTFDPIK.E + iTRAQ (K)	994.47	2	0.57			

| Thi1 | AT5G54770 | exp2 (117-r2-1/114-wt) | 4 | R.ATTAGYDLNAFTFDPIK.E + iTRAQ (K) | 994.47 | 2 | 0.46 |