

## Supplementary material

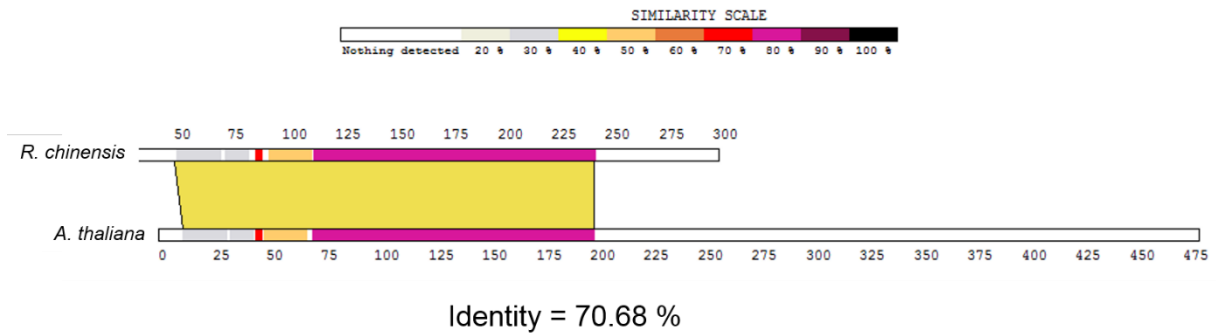
Figure S1. Result of identification of protein revealed in CPL-Rx.

1. [XP\\_024155957.1](#) Mass: 34720 Score: 957 Matches: 54(54) Sequences: 1(1) emPAI: 0.1  
protein PLASTID TRANSCRIPTIONALLY ACTIVE 14-like [Rosa chinensis]

☒ Check to include this hit in error tolerant search or archive report

	Query	Observed	Mr(expt)	Mr(calc)	ppm	Miss	Score	Expect	Rank	Unique	Peptide
<input checked="" type="checkbox"/>	<a href="#">184</a>	421.7572	841.4998	841.5022	-2.82	0	(44)	0.0023	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">185</a>	421.7573	841.5000	841.5022	-2.56	0	(43)	0.0024	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">186</a>	421.7574	841.5002	841.5022	-2.27	0	(48)	0.00092	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">187</a>	421.7574	841.5003	841.5022	-2.23	0	(40)	0.0057	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">188</a>	421.7574	841.5003	841.5022	-2.20	0	(48)	0.00089	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">189</a>	421.7575	841.5004	841.5022	-2.13	0	(43)	0.0025	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">190</a>	421.7575	841.5005	841.5022	-2.01	0	(36)	0.012	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">191</a>	421.7575	841.5005	841.5022	-1.99	0	(48)	0.00091	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">192</a>	421.7575	841.5005	841.5022	-1.99	0	(47)	0.001	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">192</a>	421.7575	841.5005	841.5022	-1.96	0	(47)	0.0011	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">194</a>	421.7576	841.5006	841.5022	-1.87	0	(32)	0.031	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">195</a>	421.7576	841.5006	841.5022	-1.85	0	(31)	0.046	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">196</a>	421.7576	841.5006	841.5022	-1.80	0	(44)	0.0023	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">197</a>	421.7576	841.5007	841.5022	-1.68	0	(48)	0.00091	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">198</a>	421.7577	841.5009	841.5022	-1.49	0	(48)	0.00094	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">199</a>	421.7578	841.5010	841.5022	-1.42	0	(44)	0.0023	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">200</a>	421.7578	841.5010	841.5022	-1.42	0	(44)	0.0024	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">201</a>	421.7578	841.5010	841.5022	-1.37	0	(31)	0.042	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">202</a>	421.7578	841.5010	841.5022	-1.37	0	48	0.00087	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">203</a>	421.7578	841.5010	841.5022	-1.35	0	(44)	0.0023	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">204</a>	421.7578	841.5010	841.5022	-1.32	0	(44)	0.0024	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">205</a>	421.7578	841.5011	841.5022	-1.30	0	(48)	0.00094	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">206</a>	421.7578	841.5011	841.5022	-1.23	0	(43)	0.003	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">207</a>	421.7578	841.5011	841.5022	-1.20	0	(47)	0.001	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">208</a>	421.7578	841.5011	841.5022	-1.20	0	(48)	0.00095	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">209</a>	421.7578	841.5011	841.5022	-1.20	0	(48)	0.00094	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">210</a>	421.7578	841.5011	841.5022	-1.20	0	(32)	0.038	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">211</a>	421.7580	841.5014	841.5022	-0.94	0	(48)	0.00096	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">212</a>	421.7580	841.5014	841.5022	-0.89	0	(48)	0.00093	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">213</a>	421.7580	841.5014	841.5022	-0.85	0	(47)	0.00097	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">214</a>	421.7580	841.5015	841.5022	-0.80	0	(44)	0.0024	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">215</a>	421.7580	841.5015	841.5022	-0.73	0	(44)	0.0021	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">217</a>	421.7581	841.5016	841.5022	-0.70	0	(48)	0.00096	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">218</a>	421.7582	841.5018	841.5022	-0.42	0	(48)	0.00092	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">219</a>	421.7582	841.5018	841.5022	-0.40	0	(43)	0.0026	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">220</a>	421.7582	841.5019	841.5022	-0.32	0	(48)	0.00094	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">221</a>	421.7582	841.5019	841.5022	-0.32	0	(47)	0.001	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">222</a>	421.7583	841.5020	841.5022	-0.23	0	(33)	0.024	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">223</a>	421.7583	841.5021	841.5022	-0.09	0	(48)	0.0009	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">225</a>	421.7584	841.5022	841.5022	0.01	0	(48)	0.0009	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">226</a>	421.7584	841.5022	841.5022	0.10	0	(48)	0.00094	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">227</a>	421.7585	841.5025	841.5022	0.39	0	(47)	0.00098	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">228</a>	421.7585	841.5025	841.5022	0.46	0	(33)	0.026	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">229</a>	421.7587	841.5029	841.5022	0.94	0	(48)	0.00092	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">230</a>	421.7588	841.5030	841.5022	0.96	0	(48)	0.0009	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">231</a>	421.7589	841.5032	841.5022	1.24	0	(44)	0.0023	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">232</a>	421.7589	841.5033	841.5022	1.32	0	(44)	0.0023	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">233</a>	421.7592	841.5038	841.5022	1.91	0	(44)	0.0023	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">235</a>	421.7594	841.5042	841.5022	2.41	0	(48)	0.00093	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">236</a>	421.7594	841.5042	841.5022	2.43	0	(48)	0.00094	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">237</a>	421.7595	841.5044	841.5022	2.62	0	(48)	0.00093	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">239</a>	421.7598	841.5050	841.5022	3.41	0	(48)	0.00097	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">240</a>	421.7598	841.5051	841.5022	3.50	0	(48)	0.00094	1	U	M.VATVSP.LR.W
<input checked="" type="checkbox"/>	<a href="#">241</a>	421.7599	841.5052	841.5022	3.62	0	(44)	0.0024	1	U	M.VATVSP.LR.W

**Figure S2.** Graphical representation of the alignment of Protein Plastid Transcriptionally Active 14 from *Rosa chinensis* and *Arabidopsis thaliana*. The alignment was visualised with LALNVIEW software from [www.expasy.org](http://www.expasy.org).



**Figure S3.** Morphology of *Rosa rugosa* Thunb.

