

## Supplementary data

### **A *Phytophthora infestans* cystatin-like protein targets a novel tomato papain-like apoplastic protease**

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**Fig. S1.** Multiple sequence alignment of PIP1 and RCR3<sup>pimp</sup> proteins. Identical amino acids are shaded in black and similar amino acids are shaded in gray. Residue numbers are indicated on the left of the sequences. The alignment was conducted using the program Clustal-X [1], and visualized with BOXSHADE [2].

1. Thompson JD, Gibson TJ, Plewniak F, Jeanmougin F, Higgins DG: The CLUSTAL\_X windows interface: flexible strategies for multiple sequence alignment aided by quality analysis tools. *Nucleic Acids Res* 1997, 25:4876-4882.
2. BOXSHADE [<http://bioweb.pasteur.fr/seqanal/interfaces/boxshade.html>]

PIP1 0 MASNFFLNITVVL<sup>L</sup>LLFSILSLYPFIVTSRNLKELSMLE<sup>R</sup>HENW<sup>M</sup>VHGRVYKDDIEKEH  
RCR3 0 MAMKVDLMNILIT--LFFVISMFNTQTRGRSOPKLSV<sup>S</sup>ERHELWMSRHGRVYKDEVEKGE

PIP1 60 RFKTFKENVEFIESFNKNGTORYKLAVNKYADLTTEEF<sup>T</sup>TTSFMGLD<sup>T</sup>SLLSQQES<sup>T</sup>ATT<sup>T</sup>T  
RCR3 58 RFMIFKENMKFIESVNKAGNLSYKLG<sup>M</sup>NEFADITSQEF<sup>L</sup>AKFTGLNIPNSYLS<sup>P</sup>SPMS<sup>S</sup>T

PIP1 120 SFKYDSVTE--VPNSMDWRKRGSVTGVKDQGVCGCCWAFSA<sup>A</sup>AAIEGAYQIANNELISLS  
RCR3 118 EFKINDLSDDYMP<sup>S</sup>NLDWRESGAVTQVKHQGRCGCCWAFSA<sup>V</sup>GSLEGAYKIATGNLMEFS

PIP1 178 EQQLLDCSTQNKGC<sup>E</sup>GGLMTVAYDFLLQ<sup>N</sup>GGGITTE<sup>T</sup>ETNYPYEEAQN<sup>V</sup>CKT-EQPAAVTI  
RCR3 178 EQELLDCTTN<sup>N</sup>YG<sup>C</sup>NGGLMTNAFD<sup>F</sup>IIEN--GGISRES<sup>D</sup>YEYLGEQYTCRSREKTA<sup>A</sup>VQI

PIP1 237 NGYEVVPSDES<sup>S</sup>LLKAVVNQPI<sup>S</sup>VGIAANDEFHMYGSGIYDGSCNSRLNHAVTVIGYGTS  
RCR3 236 SSYKVVPEGETSLLQAVTKQ<sup>P</sup>VSIGIAASQDLQFYAGGT<sup>Y</sup>DGNCADQINHAVTAIGYGT<sup>D</sup>

PIP1 297 EEDG<sup>T</sup>KYWIVKNSWGS<sup>D</sup>WGE<sup>E</sup>GYMRIARDVGV<sup>D</sup>GGHCGIAKVAS<sup>F</sup>P<sup>T</sup>A-  
RCR3 296 EE-GQKYWLLKNSWGT<sup>S</sup>WGENGFMKIIRDSGD<sup>P</sup>SGLCDIAKMS<sup>S</sup>YP<sup>N</sup>IA