

Additional file 4. Reference sequences included in the phylogenies for comparison and to root the trees. Where RLK subfamilies or generic terms (i.e. Pto-like) are cited, all sequences reported in the source were tested in the phylogenies, except pseudogenes or putative proteins with truncated kinase domains.

I - Reference sequences for phylogenies at the subfamily level		
Proteins	Species	Source
CrRLK1L	<i>Arabidopsis</i> and rice	[50]
<i>Pto</i> and relatives	<i>Solanum pimpinellifolium</i>	[39]
WAK-like	<i>Arabidopsis</i>	[4, 49]
LRR X	<i>Arabidopsis</i>	[4]
LRR XII	<i>Arabidopsis</i>	[4]
Best Pac Blastp matches	<i>Arabidopsis</i> , poplar and rice	NCBI GenBank
II - Reference sequences for phylogenetic investigation into the relations among Pto, Pto-like and CrRLK1L		
Proteins	Species	Source
Best Pto Blastp matches (i.e. CrRLK1L)	<i>Arabidopsis</i> , Poplar, Castor bean, Grapevine, Rice	NCBI GenBank
Best Blastp matches obtained using wild/cultivated strawberry and bean Pto-like	<i>Fragaria vesca</i> , <i>Phaseolus vulgaris</i>	Phytosome <i>F. vesca</i> : mrna04250.1-v1.0-hybrid mrna16583.1-v1.0-hybrid mrna14010.1-v1.0-hybrid mrna23363.1-v1.0-hybrid <i>P. vulgaris</i> : Phvul.003G239400.1 Phvul.004G038800.1 Phvul.007G188300.1
<i>Pto</i> and relatives	<i>Solanum pimpinellifolium</i>	[39]
Pto-like	Wild tomato species	[AF4.1]* [76]
Pto-like	<i>Capsicum</i> spp.	NCBI GenBank Acc. Nos: AY316952, AY316954-67
Pto-like	<i>Solanum</i> spp.	[70]
Pto-like	<i>Nicotiana repanda</i>	[75]
Pto-like	<i>Phaseolus vulgaris</i>	[69]
Pto-like	Cultivated and wild strawberry	[74]
Pto-like	<i>Musa acuminata</i>	[73]
Whole CrRLK1L subfamily	<i>Arabidopsis</i> and rice	[50]
Whole CrRLK1L subfamily	Poplar	[5]
Whole CrRLK1L subfamily	Moss	NCBI GenBank, Acc. Nos: XM_001757821, XM_001757822, XM_001760648, XM_001760727, XM_001779604
Whole CrRLK1L subfamily	Tomato	[6]
CrRLK1L-like	<i>Platanus × acerifolia</i>	This paper

III - Proteins used to root the trees

Proteins	Species	Source
CTR1, Raf kinase family	<i>Arabidopsis</i>	[3], NCBI GenBank
MPK3, MAP kinase family	<i>Arabidopsis</i>	[3], NCBI GenBank
CPK7, CDPK family	<i>Arabidopsis</i>	[3], NCBI GenBank
Several other representatives of eukaryotic protein kinase families (ePKs)	<i>Many species</i>	[3]
APH(3')III (aminoglycoside 3'-phosphotransferase)	<i>Staphylococcus</i>	[3]

* References not reported in the text.

AF4.1 Rose LE, Langley CH, Bernal AJ, Michelmore RW: **Natural variation in the Pto disease resistance gene within species of wild tomato (*Lycopersicon*). I. Functional analysis of *Pto* alleles. Population genetics of *Pto*. *Genetics*. 2005, **171**:345-357.**