10.1071/FP08241_AC

Accessory Publication: Functional Plant Biology, 2009, 36(4), 351–361.

# Accessory publication

```
AF079526-T.aestivum          ----------------------MKLQVATVASFVLVALAA--AAQAVTFD 26
TC234692-T.aestivum          ----------------------MKLQVATVASFLLVALAA--TAQAVTFD 26
Y14202-H.vulgare             ----------------------MKPQVATVAFFLLVTMAA--TARAVTFD 26
TC369550-Z.mays              ----------------------MNKRQVAAAVAALLALLAASSTAGAVTFD 29
TC108700-S.bicolor           ------------MAPTLSSDMTTMRRAAVVVVALASLLAGVAAAGAVTFS 38
TC300387-O.sativa            -------------MVFNSEFGLRHPRSRISPAASAKRRTA--PAKLVAFS 35
CT835760-O.sativa            ----------------------MKPSHVAALAALMAAVAA--TAGAVTFD 26
Y14201-H.vulgare             ----------------------MKISIAAAAVLLLALAAT---ASAVTFD 25
TC138442-S.tuberosum         -----------------LAKIISFLASL---IIILAIFT--QKINAVDYT 28
CAC40754-A.belladonna        --------------------------SS---LLILAIFT--EKIHAVEYT 19
TC177934-L.esculentum        ------------------------------------------------MTYS 4
AB024600-N.tabacum           --MKKMTEAIFVFSQVKRAHHKIFFFYS---LFVLAIFT--QKIHAVDYS 43
TC10042-N.benthamiana        ------------------AHHKIFFISS---LFFLAMFT--QKIHAVDYS 27
TC4719-C.annuum              --------------XKLAMAHKIFLISS---LFVLAIFT--PKIQAVDYS 31
TC139656-S.tuberosum         ------------------MANNIFFISS---LFVLAIFT--QKIDAVDYS 27
ES890646-L.esculentum        --------------GITSIANKQWLITFSSFLFYLSWLYSPKKMEAVDYF 36
EL457225-H.tuberosus         ----------------------MAHKIS---FLSFLGILAALRLATAVDYT 26
EE626872-H.argophyllus       --------------------HKWLTRSP---FLSFLAILAALQLATAVDYT 28
TC16809-H.annuus             ----------------------MTHKISS--FLSFLAILAALQLATAVDYT 27
DY942788-H.petiolaris        ----------------------MAHNISS--FLSFLAIFAALQQTTAVDYT 27
DY976880-L.sativa            ----------------------MATKISF--FLSSLAILAALQLSSAVDYS 27
DW104685-L.serriola          ----------------------KMVTKISF--FLSSLAILAALQLSSAVDYS 28
EH786028-C.solstitialis      ----------------------MAHKLSF--FLPSLAILATLQLITAVGYT 27
FF387787-V.unguiculata       ------------------------MIKHVLCFLVFLHA---FHRTHGVEYS 24
TC229090-G.max               ------------------------MINHALCFLVFLSA---LHATHGVEYT 24
FE688718-P.vulgaris          ------------------------MTMYVVCFLLFLAA---MQGTEAVEYS 24
TC228120-G.max               ------------------------MAMRSLCFLVFLAAA--MQGTLAVDYT 25
TC10233-L.japonicus          ------------------------MKMHFIGLLIFLTA---MQGTKAVDYT 24
TC101211-M.truncatula        XEPQTHPPTEINLRALSTSTNTNTIMHTLYFFLVLLAI--IHGIQAVDYS 48
EH042620-A.stenosperma       --------------------MKHTHETTLCLFLVILAAGRMQGSSAVDYT 30
XM_361710-M.grisea           ------------MVNMRKDSDLTSAVRDPNALFQLPMSAVGDEPRTAAAE 38


AF079526-T.aestivum          ASNK--ASGTSG----------------------GRR-------------- 39
TC234692-T.aestivum          ASNK--ASGTSG----------------------GRR-------------- 39
Y14202-H.vulgare             ASNT--ASGTAG----------------------GQR-------------- 39
TC369550-Z.mays              ATNT--ASDTPG----------------------GQR-------------- 42
TC108700-S.bicolor           ATNA--ASSTAG----------------------GKR-------------- 51
TC300387-O.sativa            RGRSRGAHGRRGR--------------------DGRRRDVRRDEHGVEHRR 66
CT835760-O.sativa            ATNT--ASNTAG----------------------GQR-------------- 39
Y14201-H.vulgare             VTNE--ASSTAG----------------------GQR-------------- 38
TC138442-S.tuberosum         VTNR--AVNTPG----------------------GAR-------------- 41
CAC40754-A.belladonna        VTNR--AANTPG----------------------GAR-------------- 32
TC177934-L.esculentum        ITNT--AANTPG----------------------GAR-------------- 17
AB024600-N.tabacum           VTNT--AANTAG----------------------GAR-------------- 56
TC10042-N.benthamiana        VANT--ATNTAG----------------------GAR-------------- 40
TC4719-C.annuum              VTNT--ASNTPG----------------------GAR-------------- 44
TC139656-S.tuberosum         VTNT--AANTPG----------------------GAR-------------- 40
ES890646-L.esculentum        VTNT--AANTPG----------------------GAR-------------- 49
EL457225-H.tuberosus         ITNT--ATAIPG----------------------GVR-------------- 39
EE626872-H.argophyllus       VTNT--ATAIPG----------------------GVR-------------- 41
TC16809-H.annuus             VTNT--AAATPG----------------------GVR-------------- 40
DY942788-H.petiolaris        VTNR--AAATPG----------------------GVK-------------- 40
DY976880-L.sativa            VTNR--AAATPG----------------------GVK-------------- 40
DW104685-L.serriola          VTNR--AAATPG----------------------GVK-------------- 41
EH786028-C.solstitialis      VTHT--AASTPG----------------------GIR-------------- 40
FF387787-V.unguiculata       VTNK--ALSTPG----------------------GVA-------------- 37
```

```
TC229090-G.max              VTNN--ALSTPG--------------------GVA-------------- 37
FE688718-P.vulgaris         FTNN--ALSTPG--------------------GVR-------------- 37
TC228120-G.max              VTNN--ALSTSG--------------------GVR-------------- 38
TC10233-L.japonicus         VTNK--ALSTPG--------------------GVR-------------- 37
TC101211-M.truncatula       VTNN--ALSTPG--------------------GVR-------------- 61
EH042620-A.stenosperma      VTNR--ALSTSG--------------------GVR-------------- 43
XM_361710-M.grisea          APPPPSATVTPEETKNAAGEDDQPHSPTLPCSSSSTFPLPTLRLEVRDVM 88
                                  *                              .

AF079526-T.aestivum         ---FNQAV-VPYSKKVLSDASAFIWKTFNQRAVG-DRKTVD--AVTLVVE 82
TC234692-T.aestivum         ---FEQAVGLPYSKKVLSDASAFIWKTFNQRGVG-DRKPVD--AVTLVVE 83
Y14202-H.vulgare            ---FDNAVGLAYSKQVLSDASTFIWNTFNQRAAA-DRKPVD--AVTLVVE 83
TC369550-Z.mays             ---FDQAVGLDYAKQVLADASTFIWNTFDQPSPA-DRKPVD--AVTLVVE 86
TC108700-S.bicolor          ---FGRDIGVAYSRRVLSDASSFCWKTFSQPNPG-SRKPVS--SVTLVXE 95
TC300387-O.sativa           RAAVDREVGVDYAKQMLADASSFIWDTFEQPGDGGDRKPVD--AVTLTVE 114
CT835760-O.sativa           ---FDREVGVDYAKQMLADASSFIWDTFEQPGDGGDRKPVD--AVTLTVE 84
Y14201-H.vulgare            ---FDREYGAAYAKQVLSDASSFTWGIFNQPDPS-DRRPADGDTVTLAVR 84
TC138442-S.tuberosum        ---FNRDIGAQYSKQTLAAATSFIWNTFQQNS-PADRKNVQ--IINMYVD 85
CAC40754-A.belladonna       ---FDRDIGVPYSRLTLAFSTSFIWRIFEQNS-PADRKNVQ--KISMFVD 76
TC177934-L.esculentum       ---FNRDIGAQYCQQTLAAATSFIWNIFQQNF-PADRKNVP--KVSMFVD 61
AB024600-N.tabacum          ---FNRDIGAQYSQQTLAAATSFIWNTFQQNF-PADRKNVQ--KVSMFVD 100
TC10042-N.benthamiana       ---FNRDIGAQYSQQTLEAATSFIWNTFQQNS-PADRKNVQ--KVSMFVD 84
TC4719-C.annuum             ---FDRDIGAQYSQQTLTAATSFIWNTFQQNS-PADRKNVQ--KVSMFVD 88
TC139656-S.tuberosum        ---FDRDIGAQYSQQTLVAATSFIWNIFQQNS-PADRKNVP--KVSMFVD 84
ES890646-L.esculentum       ---FDRDIGAQYSQQTLVAATSFIWNIFQQNS-PADRKDVP--KVNMFVD 93
EL457225-H.tuberosus        ---FTNDIGVEYTTQTLASATSFIWNTFQQNT-ENDRKNVA--SVSVFID 83
EE626872-H.argophyllus      ---FTNDIGVEYTTQTLASATSFIWNTFQQNT-ENDRKNVA--SVSVFSD 85
TC16809-H.annuus            ---FTNDIGVEYTTQTLASATSFIWNTFQQNS-ENDRKNVA--SVSVFID 84
DY942788-H.petiolaris       ---FTNNIGVGYTKQTLFSAKTFIWATFQQNT-RRDIKNVA--RVSVFID 84
DY976880-L.sativa           ---FNNVIGAAYTTQTLRSATSFIWTTFQQNT-AADRKNVA--RVNVFID 84
DW104685-L.serriola         ---FNNVIGAAYTTQTLRSATSFIWTTFQHST-AANRKNVA--RVNVFID 85
EH786028-C.solstitialis     ---FTNDIGNDYTVQTLNAATAFIWNTFQQNT-DADRKNVA--RVSVFID 84
FF387787-V.unguiculata      ---FRDKIGADYAKRTLDSATQFIWRVLQLNN-PGDRKSVQ--KVSLFVD 81
TC229090-G.max              ---FRDKIGAEYAKRTLDSATQFIWRIFQQNN-PSDRKNVQ--KVSLFVD 81
FE688718-P.vulgaris         ---FRDEIGEEYTKQTLDSATQFIWGIFQQNS-PADRKSVE--KVSLFVD 81
TC228120-G.max              ---FRDAIGDDYAKQTLDSATQFIWGVLQQNA-PADRKDVQ--KVNLFVD 82
TC10233-L.japonicus         ---FRDQIGEASARQTLDSATQFIWRIFQQNT-AADRKNVE--KVSLFID 81
TC101211-M.truncatula       ---FRDQLGAQYATQTLDSATQFIWRVFQQNN-PADRKNVQ--KVSLFVD 105
EH042620-A.stenosperma      ---FRDQIGAEYARQTLNKATQFIWSVFQQNNNPSERKTVQ--QVSLFVD 88
XM_361710-M.grisea          HTGAHRFLSRVDASATLPTAVANVQRILYNTPKDHTTHLPPTRSVTLILR 138
                                        *  :       :         :      :.:

AF079526-T.aestivum         DISGVAFTS-------ANGIHLSAQYVGGIS----------GDVKKEVTG 115
TC234692-T.aestivum         DISGVAFTS-------ANGIHLSAQYVGGIS----------GDVKKEVTG 116
Y14202-H.vulgare            DIGGVAFAS-------GNGIHLSAKYVGGYS----------GDVKKEVTG 116
TC369550-Z.mays             DIGGVAFTS-------ANGIHLSAQYVGGYS----------GDVKTEVTG 119
TC108700-S.bicolor          DIGGVAFTS-------GNGIHLSAQYVGGYS----------GDIKTEAAG 128
TC300387-O.sativa           DIDGVAFTS-------GDGIHLSARYVGGYSAA--------GDVRAEVTG 149
CT835760-O.sativa           DIDGVAFTS-------GDGIHLSARYVGGYSAT--------GDVRAEVTG 119
Y14201-H.vulgare            DTNGIASTS-------GSTIELSARSVGGITG---------DNLKEQVDG 118
TC138442-S.tuberosum        DMGGVAYTS-------GNEIHVSARYIQSYS----------GNVKREITG 118
CAC40754-A.belladonna       DMDGVAYAV-------NDEIHVSARYIQSYS----------GDVRREIAG 109
TC177934-L.esculentum       DMAGVAYTN-------NNTIHVSAR------------------------- 79
AB024600-N.tabacum          DMDGVAYAS-------NNEIHVSASYIQGYS----------GDVRREITG 133
TC10042-N.benthamiana       DMDGVAYAS-------NNEIHVSAHYIQGYS----------GDVRREITG 117
TC4719-C.annuum             DMDGVAYAI-------NNEIHVSARYIQGYS----------GDVRREITG 121
TC139656-S.tuberosum        DMDGVAYAS-------NNEIHVSARYIQGYS----------GDVRREITG 117
ES890646-L.esculentum       DMDGVAYAS-------NNEIHVSARYIQGYS----------GDVRREIIG 126
```

```
EL457225-H.tuberosus         DMDGVAYAS-------NNEIHVSARYIQGYS----------GDVKTEITG 116
EE626872-H.argophyllus       DMDGVAYAS-------NNEIHVSARYIQGYS----------GDVKTEITG 118
TC16809-H.annuus             DMDGVAYAS-------NNEIHVSARYIQGYS----------GDVKTEITG 117
DY942788-H.petiolaris        DMDGVAYAS-------NNEIHVSAKYIQGYS----------GDVKTEITG 117
DY976880-L.sativa            DMDGVAYTS-------GNEIHVSARYIQGYS----------GDVKKEITG 117
DW104685-L.serriola          DMDGVAYTS-------GNEIHVSARYIQGYS----------GDVKKEITG 118
EH786028-C.solstitialis      DMDGVAYAI-------NNEIHVSARYIQGIS----------GDPKTEITG 117
FF387787-V.unguiculata       DMDGVAYTS-------NDQIHLSARYVGNYQ----------GDVKREVSG 114
TC229090-G.max               DMDGVAYTS-------NNQIHLSARYVGNNK----------GDVKTEITG 114
FE688718-P.vulgaris          DMDGVAYTS-------NDEIHVSARYVNGYS----------GDVRIEITG 114
TC228120-G.max               DMDGVAYTS-------NDEIHLSARYVNDYS----------GDLKTEITG 115
TC10233-L.japonicus          DMDGVAYTS-------NNEIHLSARYVNSYG----------GDLKREISG 114
TC101211-M.truncatula        DMDGVAYTS-------NNEIHLSARYVNSYG----------GDLRKEITG 138
EH042620-A.stenosperma       DMDGVAYTS-------NNEIHLSARYVGSYS----------GDVKTEVTG 121
XM_361710-M.grisea           DMDGVAYTTGSELDSDHKEIHFSLHYIESISKREKCSGDENDGIAHEIVG 188
                             *  *:* :         . *..*


AF079526-T.aestivum          VLYHEATHVWQWNGPG-QANGGLIEGIADYVRLKAGFAPGHWVKPGQGDR 164
TC234692-T.aestivum          VLYHEATHVWQWNGQG-RANGGLIEGIADYVRLKAGFAPGHWVKPGQGDR 165
Y14202-H.vulgare             VLYHEATHVWQWNGRG-TANGGLIEGIADYVRLKAGLAPGHWRPQGSGDR 165
TC369550-Z.mays              VLYHETTHVWQWDGQG-QANGGLIEGIADYVRLKAGYAPGHWVQPGQGDR 168
TC108700-S.bicolor           VLYHEVTHVWQWDGQG-KANGGLIEGIADYVRLKAGYAPGHWGKPGQGDR 177
TC300387-O.sativa            VLYHEATHVWQWDGRG-GADGGLIEGIADFVRLRAGYAPPHWVQPGQGDR 198
CT835760-O.sativa            VLYHEATHVWQWDGRG-GADGGLIEGIADFVRLRAGYAPPHWVQPGQGDR 168
Y14201-H.vulgare             VLYHEVVHVWQWGLQDYHEHHGIFEGIADYVRLKAGYVAANWVKEGGGSR 168
TC138442-S.tuberosum         VLYHENTHIWQWNGNG-RAPGGLIEGIADYVRLKAGYAPSHWVKPGQGDR 167
CAC40754-A.belladonna        VLYHECTHVWQWNGNG-RAPGGLIEGIADYVRLKAGLAPSHWVKPGQGDR 158
TC177934-L.esculentum        ------------------APGGLIEGIADYVRLKAGLGLSHWVKPGQGDR 111
AB024600-N.tabacum           VLYHESTHVWQWNGNG-GAPGGLIEGIADYVRLKAGFAPSHWVKPGQGDR 182
TC10042-N.benthamiana        VLYHESTHVWQWNGNG-GAPGGLIEGIADYVRLKAGFGPSHWVKPGQGDR 166
TC4719-C.annuum              VLYHESTHVWQWNGNG-GAPGGLIEGIADYVRLKAGLGPSHWVKPGQGDR 170
TC139656-S.tuberosum         VLYHEATHVWQWNGNG-GAPGGLIEGIADYVRLKAGLGPSHWVKPGQGNR 166
ES890646-L.esculentum        VLYHEATHVWQWNANN-GAPEGLIEGIADYVRLKAGLGPSHWVKP-QGDR 174
EL457225-H.tuberosus         VLYHEMTHIWQWNGNG-QAPGGLIEGIADYVRLKAGYAPSHWVQPGQGDR 165
EE626872-H.argophyllus       VLYHEMTHIWQWNGNG-QAPGGLIEGIADYVRLKAGYAPSHWVQPGQGDR 167
TC16809-H.annuus             VLYHEMTHIWQWNGNG-QAPGGLIEGIADYVRLKAGYAPSHWVQPGQGDR 166
DY942788-H.petiolaris        VLYHEMTHIWQWDGKG-QAPGGLVEGIADYVRLKAGYAPSHWVRPGQGDR 166
DY976880-L.sativa            VLYHEMTHVWQWNGNG-QAPGGLIEGIADYVRLKAGYAPSHWVRPGQGNK 166
DW104685-L.serriola          VLYHEMTHVWQWNGNG-QAPGGLIEGIADYVRLKAGYVPSHWVRPGQGNK 167
EH786028-C.solstitialis      VLYHESTHVWQWNGNG-NAPGGLIEGIADYVRLKAGYIPGHWVQPGEGDR 166
FF387787-V.unguiculata       VLYHEMVHVWQWNGNG-GAPGGLIEGIADFVRLKANYAPSHWVKAGQGQK 163
TC229090-G.max               VLYHEMVHVWQWSGNG-RAPGGLIEGIADYVRLKANYAPSHWVKAGQGQK 163
FE688718-P.vulgaris          VLYHEMVHVWQWSG-----PTGVIEGIADYVRLKANYAPSHWKKPGEGQK 159
TC228120-G.max               VLYHEMVHVWQWNGNG-QTPSGLIEGIADYVRLKANYAPSHWVKAGQGEK 164
TC10233-L.japonicus          VLYHEMVHVWQWNGNG-GAPGGLIEGIADYVRLKADYAPSHWVKPGQGNK 163
TC101211-M.truncatula        VLYHEMTHVWQWNGNG-QANGGLIEGIADYVRLKANYAPSHWVKPGQGNK 187
EH042620-A.stenosperma       VLYHEMTHVWQWNGNG-QAPGGLIEGIADFVRLKANLGPSHWVKPGQGNK 170
XM_361710-M.grisea           VITHELVHCYQWDAKG-TCPGGLIEGIADFVRLRCGLSPPHWEKDLEG-S 236
                                                *:.*****:***:..    :*     *

AF079526-T.aestivum          WDQGYDVTARFLDYCDS--LKPGFVAHVNAKMKSGYTDD--FFAQILGKN 210
TC234692-T.aestivum          WDQGYDVTARFLDYCDS--LKPGFVAQLNAKMKSGYTDD--FFAQILGKN 211
Y14202-H.vulgare             WDQGYDITARFLDYCDS--LMPGFVAQLNAKMKSGYSDD--FFAQILGKN 211
TC369550-Z.mays              WDQGYDVTARFLDYCDS--LKPGFVALLNAKMKDGYTDD--FFAQILGKT 214
TC108700-S.bicolor           WDQGYDVTARFLDYCDS--LKPGFVAQLNAKMKGGYSDD--FFAQILGKN 223
TC300387-O.sativa            WDQGYDVTARFLDYCDSPAVVQGFVAQLNGKMKDGYSDD--FFVQISGKT 246
CT835760-O.sativa            WDQGYDVTARFLDYCDSPAVVQGFVAQLNGKMKDGYSDD--FFVQISGKT 216
Y14201-H.vulgare             WDEGYDVTARFLDYCDS--RKPGFVAEMNGKLKDGYNDD--YFVQILGTS 214
TC138442-S.tuberosum         WDQGYDVTARFLDYCNS--LKSGFVAQLNKKMRTGYSNQ--YFVDLMGKT 213
CAC40754-A.belladonna        WDQGYDVTARFLDYCNS--LKNGFVAQLNKKMRNGYSNQ--FFVELLGKT 204
TC177934-L.esculentum        WDQGYDVTAQFLNYCNS--LRNGFVAELNKKMKNGYSDQ--FFVDLLRKT 157
AB024600-N.tabacum           WDQGYDVTARFLDYCNS--LRNGFVAQLNKKMRTGYSNQ--FFIDLLGKT 228
TC10042-N.benthamiana        WDQGYDVTARFLDYCNS--LRNGFVAQLNKKMRTGYSNQ--FFVDLLGKT 212
TC4719-C.annuum              WDQGYDVTARFLDYCNS--LRNGFVAELNKKMRSG--------------- 203
```

```
TC139656-S.tuberosum         WDQGYDVTAQFLDYCNS--LRNGFVAELNKKMRNGYSDQ--FFVDLLGKT 212
ES890646-L.esculentum        W-QGY-VTAQF-DYCN---LRNG--VALNKKMRNGYNDQ--FF------- 207
EL457225-H.tuberosus         WDQGYDVTARFLDYCNG--LRDGFVAELNKKMRDGYNDG--FFVDLLGKT 211
EE626872-H.argophyllus       WDQGYDVTAQFLDYCNG--LRDGFVAELNKKMRDGYNDG--FFVDLLGKT 213
TC16809-H.annuus             WDQGYDVTARFLDYCNG--LRDGFVAELNKKMRDGYNDG--FFVDLLGKT 212
DY942788-H.petiolaris        WDQGYDVTARFLDYCNG--LRGGFVAELNKKMRSGYDNG--FFVELLGKT 212
DY976880-L.sativa            WDQGYDVTARFLDYCNG--RRSGFVAELNKKMRNGYNDG--YFVDLLGKT 212
DW104685-L.serriola          WDQGYDVTARFLDYCNG--RRRGFVADLNKKMRNGYNDG--YFVDLLGKS 213
EH786028-C.solstitialis      WDQGYDVTARFLDYCNG--LRNGFVAELNKKMRDGYSDG--FFVDLLGKT 212
FF387787-V.unguiculata       WDQGYDVTARFLDYCNT--LKGGFVAQLNKLMRNGCSDQ--YFVQLLGKP 209
TC229090-G.max               WDQGYDVTARFLDYCDS--LKSGFVAQLNKLMRTGYSDQ--YFVQLLGKP 209
FE688718-P.vulgaris          WDQGYDVTAHFLDYCDS--LKSGFVAQLNQQMRSGYSDE--LFVQLLGKT 205
TC228120-G.max               WDQGYDVTAHFLDYCDS--LKSGFVAQLNQQMRDGYSDQ--LFVQLLGKT 210
TC10233-L.japonicus          WDHGYDVTARFLDYCNS--LKNGFVAELNKKMRTGYSDQ--FFVQILGKS 209
TC101211-M.truncatula        WDQGYDVTARFLDYCDT--LRSGFVAELNKLMRNGYSDQ--FFVQLLGKT 233
EH042620-A.stenosperma       WDQGYDVTARFLDYCNG--LKNGFVADLNKLLN-GYSDQ--FFVQLLGKT 215
XM_361710-M.grisea           WDRGYQHTAYFLDYLECR-FGDGTVRKINEGLRTRKYEEKPFWTEIVGRP 285
                             * .**  ** * :* :      *    :*  :.



AF079526-T.aestivum          VQQLWKDYKAKFRG-------------- 224
TC234692-T.aestivum          VQQLWKDYKAKFRG-------------- 225
Y14202-H.vulgare             VQQLWKDYKAKFGG-------------- 225
TC369550-Z.mays              VQQLWQDYKAKYGG-------------- 228
TC108700-S.bicolor           VQQLWKDYKAKYGG-------------- 237
TC300387-O.sativa            IDQLWQDYKAKYGG-------------- 260
CT835760-O.sativa            VDQLWQDYKAKYGG-------------- 230
Y14201-H.vulgare             ADQLWNDYKAKYSQG------------- 229
TC138442-S.tuberosum         VDQLWRDYKAKFPTMNELV--------- 232
CAC40754-A.belladonna        VDQLWSDYKAKFRAEHDIA--------- 223
TC177934-L.esculentum        VDQLWGDYKAKFRGNFRLNRE------- 178
AB024600-N.tabacum           VDQLWSDYKAKFRA-------------- 242
TC10042-N.benthamiana        VDQLWNDYKAKFRA-------------- 226
TC4719-C.annuum              ---------------------------
TC139656-S.tuberosum         VDQLWSDYKAKFGA-------------- 226
ES890646-L.esculentum        ---------------------------
EL457225-H.tuberosus         VDQLWAEYKA------------------ 221
EE626872-H.argophyllus       VDQLWAEYKATEYK-------------- 227
TC16809-H.annuus             VDQLWAEYKAT----------------- 223
DY942788-H.petiolaris        VDQLWAEYKANAN--------------- 225
DY976880-L.sativa            VAQLWAEYKA------------------ 222
DW104685-L.serriola          VAQLWAEYKA------------------ 223
EH786028-C.solstitialis      VDQLWAEYKA------------------ 222
FF387787-V.unguiculata       VDQLWRDYKAKYGNTAED---------- 227
TC229090-G.max               VDQLWRDYKAKYGNIA------------ 225
FE688718-P.vulgaris          VDQLWQE--------------------- 212
TC228120-G.max               VDQLWQDYKAKYGTS------------- 225
TC10233-L.japonicus          VDQLWTDYKAKYGNIA------------ 225
TC101211-M.truncatula        VNQLWTEYKAK----------------- 244
EH042620-A.stenosperma       VDQLWEDYKAKYGHLS------------ 231
XM_361710-M.grisea           VEQLWADYVKASKCDEDPAVAETAKAVA 313
```

**Fig. S1.** Alignment of 30 amino acid sequences of PRp27 homologues from plants in four different families. A homologue from fungus *Magnaporthe grisea* (XM_361710) was included for comparison. Sequences were aligned using CLUSTALX. A description of the sequences is provided in Table 1.

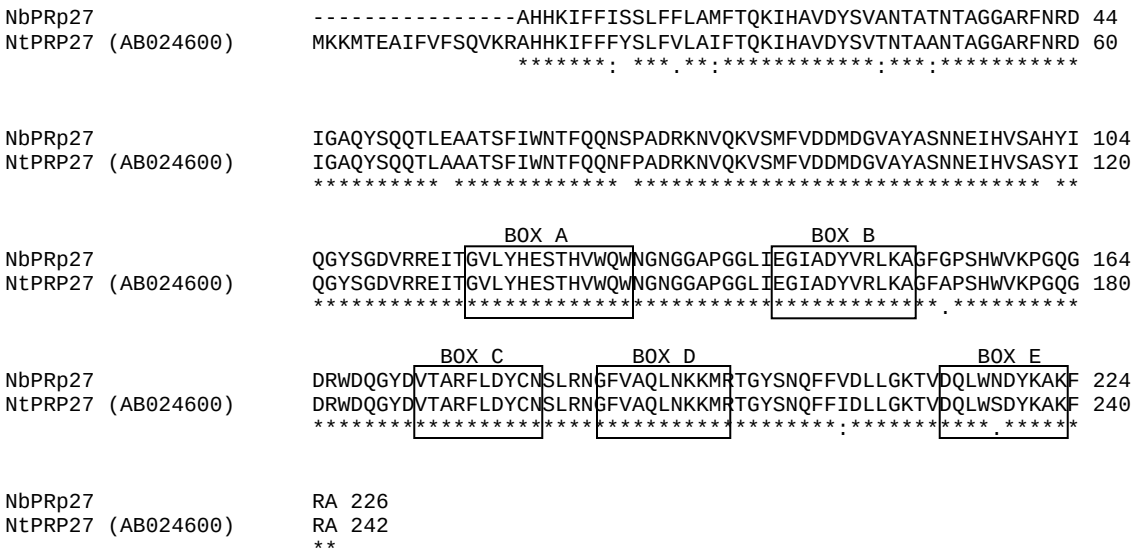


**Fig. S2.** A comparison of Box A-Box E (Christensen *et al.* 2002) between *NtPRp27* and *NbPRp27*. Sequences were aligned using CLUSTALW2 (http://www.ebi.ac.uk/Tools/clustalw2/index.html).

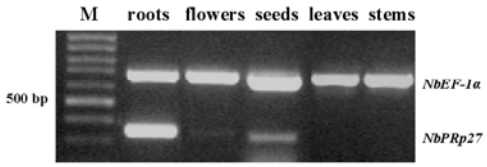


**Fig. S3.** Gel picture of relative RT-PCR of *NbPRp27* in different tissues of *N. benthamiana*. *NbPRp27* was co-amplified with *NbEF-1α* using cDNA from roots, flowers, seeds, leaves or stems. Lane M is the 100 bp ladder.

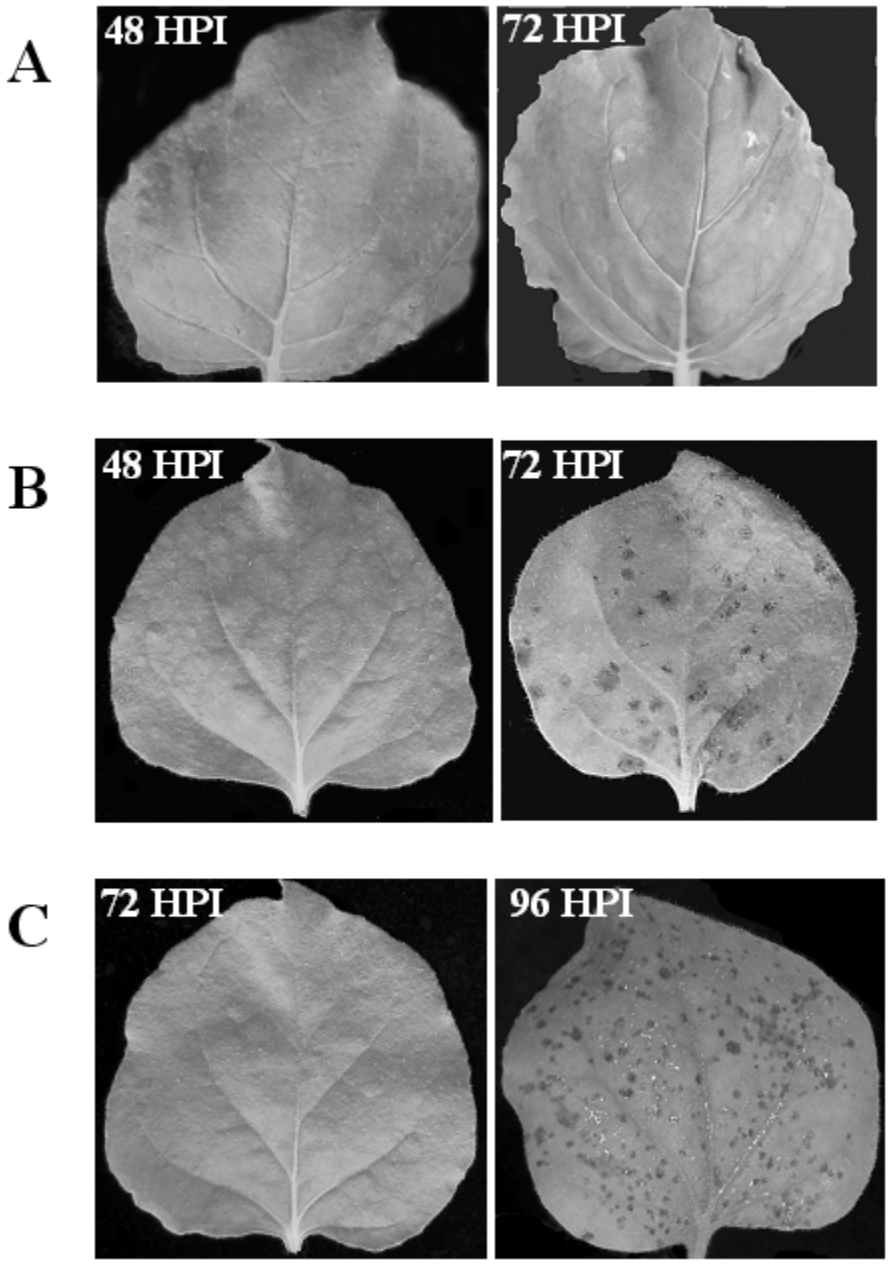


**Fig. S4.** Images of *N. benthamiana* leaves infected by (A) *P. syringae* pv. *tabaci,* (B) *C. destructivum* and (C) *C. orbiculare* during biotrophy or necrotrophy. Images were taken of the youngest fully matured leaf during the symptomless biotrophic phase of infection at 48 HPI with *P. syringae* pv. *tabaci*, 48 HPI with *C. destructivum* and 72 HPI with *C. orbiculare*., or the necrotrophic phase of infection at 72 HPI with *P. syringae* pv. *tabaci*, 72 HPI with *C. destructivum* and 96 HPI with *C. orbiculare*.