

Table S1. BLAST searches in different pea transcriptome databases of the *P. sativum* Lyk genes.

| <i>Medicago truncatula</i> <i>Mt4.0v1</i> | <i>Pisum sativum</i> cv. SGE http://blast.ncbi.nlm.nih.gov/ (Zhukov et al., 2015) | <i>Pisum sativum</i> cv. Cameor http://bios.dijon.inra.fr/ | <i>Pisum sativum</i> http://blast.ncbi.nlm.nih.gov/ (other projects) | <i>Pisum sativum</i> GenBank accession number |
|---|---|---|---|--|
| <i>MtLYK1</i> AY372401, (Medtr5g086540) XM_003616943 | - | - | - | - |
| <i>MtLYK2</i> BN001116, (Medtr5g086310, Medtr5g086330) XM_003616924 XM_003616926 | - | - | GAMJ01007644 GEUU01084920 | <i>PsK1</i> EU564096, <i>PsSym37</i> EU564088 |
| <i>MtLYK3</i> AY372406, (Medtr5g086130) XM_003616910 | - | - | GAMJ01007644 GEUU01084920 | <i>PsK1</i> EU564096, <i>PsSym37</i> EU564088 |
| <i>MtLYK4</i> AY372407, (Medtr5g086120) XM_003616909 | GDTM01035166 | PsCam010968 | GCMK01002635 GCMJ01007867 | - |
| <i>MtLYK5</i> BN001117, (Medtr5g086090) XM_003616906 | - | - | - | - |
| <i>MtLYK7</i> AY372405, (Medtr5g086030) XM_003616900 | GDTM01003580 | - | GEZC01028741 GEZC01034730 GCMF01025080 | - |
| <i>MtLYK8</i> (Medtr2g024290) XM_013607437 | GDTM01039384 | - | GCMO01034719 GEUU01078867 | - |
| <i>MtLYK9</i> (Medtr3g080050) XM_003601328 | GDTM01035167 GDTL01025510 | - | GEZC01062852 | - |
| <i>MtLYK10</i> (Medtr5g033490) XM_003613117 | GDTM01015333 | PsCam036987 | GCMK01009418 | - |

Table S2. List of primers.

| Gene | Product | Primers |
|-----------------|---|---|
| <i>PsLyk9</i> | LysM-receptor-like kinase | F - TCCACTATGCTAATTTAACCAATGTTC R - TCGCAAGTATCCAAAATATACACCAG |
| <i>PR1</i> | Disease resistance protein | F - GGGGTCCATATGGTGAGAAC R - TAATAACCAGGTGGATCATAGTTACA |
| <i>PR10</i> | Disease resistance protein PR10-1 (DRR49a), Putative RNase | F - GCCGGAACCATCAAGAACT R - GCCTTGAAAAGACCATCACCC |
| <i>PAL1</i> | Phenylalanine ammonium lyase 1 | F - TGAGAATCAACACACTTCTCCAAGG R - GCATTAAGAATTTCCCCAGAGGTC |
| <i>PAL2</i> | Phenylalanine ammonium lyase 2 | F - TGAGAATCAACACACTTCTCCAAGG R - AGCATTAAGTATTTCTCCAGACGGTC |
| <i>AM1</i> | Putative peroxidase | F - TGCTAGCTAGCACTGCTCTACTA R - GCTAGCGAGTACGCTACGGG |
| <i>AM3</i> | Unknown protein | F - TGCTAGCTACGATCGACTCGTGCC R - TAGCTAATCTTAGCGCGTTATGC |
| <i>AM5</i> | Putative proteinase | F - GTATTCGGGCTATTGTATTCGCGT R - ATCTCGCGTATTTGCGCGATTTC |
| <i>DRR 232a</i> | Disease resistance protein DRR 232a | F - CGTATTACGGGCTATAGCGGTCT R - GCTATTAGCGGCAATTATCTGGTGT |
| <i>GST</i> | Glutathione-S-transferase | F - CGATCTTATCGGTTCGCATGTCTGT R - GCTACATCGGGTATTCGTCGATTTC |
| <i>PT4</i> | Inorganic phosphate transporter 4 | F - CATTCTGAGCTGATCGTCGTATGGTG R - GCATTAAGAATTTCCCCAGAGGTC |
| <i>DWARF27</i> | Iron-containing protein required for the biosynthesis of strigolactones | F - GTATTATTATGCTCGCCCCTAGCTAC R - TATTATATCGGCGGTACTACTGCAC |
| <i>DELLA</i> | DWARF8-like GAI protein | F - TCGTAGCGACATCCTCTCTCTACTAGG R - TGCATGCCTGGCCTATTTATACGCTTCG |
| <i>NSP1</i> | GRAS family transcription factor | F - TATTGCTACGTCTAGTAGTCTTAGCTG R - GCTACTAGCGTCTCATCTAGCTAACC |
| <i>NSP2</i> | GRAS family transcription factor | F - TACGTACTCCTGGGTAGCTGCTGTAC R - TCGTACGTCGTACGTACGTAGCTGA |
| <i>RAM1</i> | GRAS family | F - TTAGCTGTACGTACGTACGTACGTAGTC |

| | | |
|---------------|--------------------------------------|---|
| | transcription factor | R - TCGTACGCCTTCTGAGTCTCTAGGGTC |
| <i>Myb-TF</i> | Myb- transcription factor | F - GCTACGTGGCGCTATATATCGGGC R - TGGCCTATCGTACTCCGTTTAGG |
| <i>RAM2</i> | Glycerol-3-phosphate acyltransferase | F - GCTACTATTAAATTCTCCCTTCGCCG R - CTAGCTGTAGCTATATACCTACTTG |