

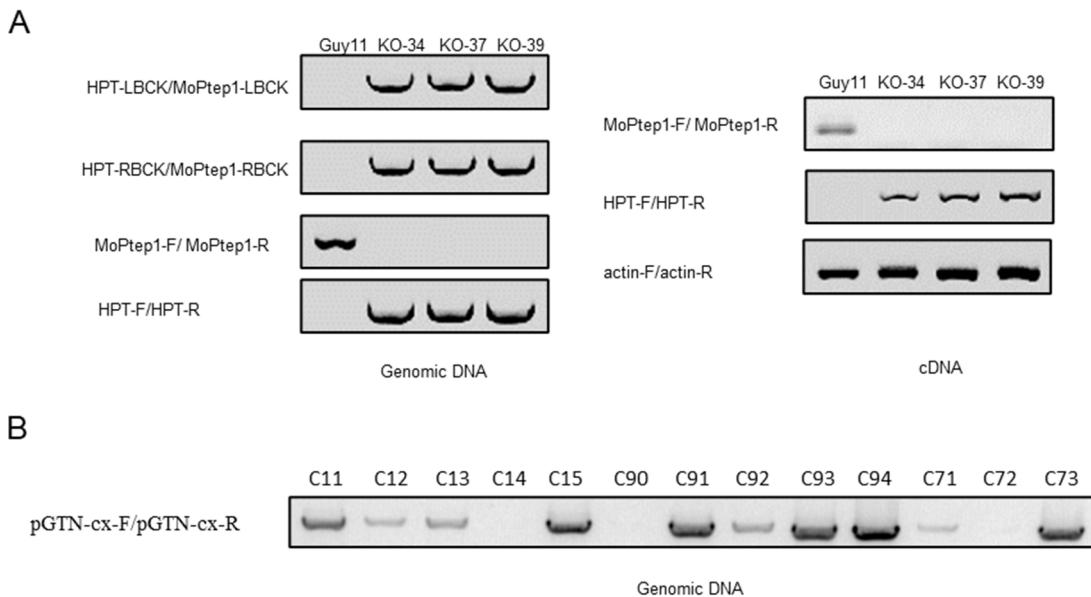
**Supplemental Table S1. Primers used in this study**

| Primer name   | Sequence (5'-3')                            |
|---|---|
| <b>Secretory validation vector construction primers</b> |   |
| pSUC2-MoPtep1-FL-F                                      | CGGAATTAAATTAAGAATTCACTGCGGTCTATAGCTATCCTGA |
| pSUC2-MoPtep1-FL-R                                      | CACTATAGGGAGAACCTCGAGGCTGGAGGGGGAACGGCTTG   |
| pSUC2-MoPtep1-NS-F                                      | CGGAATTAAATTAAGAATTCACTGCTTCAGATCCCAGACCTCC |
| <b>Knockout mutant strains construction primers</b>     |   |
| HPT-F   | CTTGGCTGGAGCTAGTGGAGGT                      |
| HPT-R   | CCCGGTCGGCATCTACTCTATT                      |
| HPT-F1  | CGTTGCAAGACCTGCCTGAA                        |
| HPT-R1  | GGATGCCTCCGCTCGAAGTA                        |
| HPT-LBCK  | GACAGACGTCGCGGTGAGTT                        |
| HPT-RBCK  | TCTGGACCGATGGCTGTGTAG                       |
| MoPtep1-LBCK  | ACAGTGCTTGGGAATGGGAC                        |
| MoPtep 1-LB-R   | ACCTCCACTAGCTCCAGCCAAGGATGAAATCATGGCTAGATT  |
| MoPtep 1-RBCK   | CTCATCCAGCGTCAAGGCCA                        |
| MoPtep 1-RB-F   | GAATAGAGTAGATGCCGACCGGGGAAAGATTGGATGCAGCAAC |
| MoPtep 1-LB-F   | TCGAGTCGTTCTCCAAGTTT                        |
| MoPtep 1-RB-R   | TTCACCACTCCGACAGGTAC                        |
| <b>Knockout mutant strain checking primers</b>          |   |
| MoPtep1-F   | ATGCGGTCTATAGCTATCCT                        |
| MoPtep1-R   | TTAGCTGGAGGGGGAACGG                         |
| <b>Complementary strains construction primers</b>       |   |
| C-MoPtep1-pGTN-F-1                                      | GGGAACAAAAGCTGGTACCGAGAAGCTCGTGGCCGTGTC     |
| C-MoPtep1-pGTN-R  | ATTCTAGAACTAGTGGATCCGCTGGAGGGGGAACGGCTT     |
| <b>Complementary strains checking primers</b>           |   |
| pGTN-cx-F   | CATTAGGCAC CCCAGGCTT                        |
| pGTN-cx-R   | TCGTGACCA CCCTGACCTAC                       |
| <b>MoPtep1 expression primers</b>                       |   |

|  |   |
|--|---|
| RT-MoPtep1-qF  | TCAGATCCCAGACCTCCTG                       |
| RT-MoPtep1-qR  | CGTGACTGTATGGTTTTG                        |
| RT-Mo-Actin-qF   | TGACGTCCGAAAGGATCTGT                      |
| RT-Mo-Actin-qR   | CCTGCTTCGAGATCCACATC                      |
| <b>Subcellular localization and cell death observation primers</b> |   |
| MoPtep1-FL-GFP-F   | CGCTCTAGAACTAGTGGATCCATGCGGTCTATAGCTATCCT |
| MoPtep1-FL-GFP-R   | GGGCCCCCCCTCGAGGTCGACGCTGGAGGGGAACGGCTT   |
| MoPtep1-NS-GFP-F   | CGCTCTAGAACTAGTGGATCCATGCTTCAGATCCCAGACCT |
|  |   |

**Supplemental Table S2. Information on candidate interacting proteins of MoPtep1**

| Name        | Number of amino acids/aa | GenBank accession | Gene description                   | Extend information  |
|-------------|--------------------------|-------------------|------------------------------------|---|
| <b>HZ-7</b> | 270                      | XP_015646760.1    | <b>momilactone A synthase-like</b> | Momilactone: An antibacterial compound found in husks of rice, a natural defense substance that has the activity of suppressing the growth of pathogens such as blast fungus.                       |
| <b>IP-4</b> | 177                      | XP_015618577.1    | <b>thaumatin-like protein</b>      | This family is also referred to as pathogenesis-related group 5 (PR5), as many thaumatin-like proteins accumulate in plants in response to infection by a pathogen and possess antifungal activity. |
| <b>HZ-4</b> | 152                      | XP_040380872.1    | <b>plastocyanin, chloroplastic</b> | Plastocyanin; Plastocyanin is a type I copper protein and functions in the electron transfer from PSII to PSI.  |



**Supplemental Figure S1:** Identification of the transformants using PCR method. (A) identification of *MoPtep1* ko mutant strains via PCR method. Use the Split-PCR method to knock out the *MoPtep1* gene. Using wild-type strains and transformants' genomic DNA as templates, primers were used to amplify corresponding bands to verify transformants. At the same time, RT-PCR was used for testing. MoPtep1-F/MoPtep1-R cannot amplify bands were the correct knockout strains. (B) identification of the complementary strain of *MoPtep1* via PCR method. Use vector pGTN to construct *MoPtep1* complementary vector, transform the constructed vector into the protoplasts of *MoPtep1* ko mutant strains, and screen with G418-resistant plates. Use pGTN-cx-F/pGTN-cx-R for PCR screening of the grown transformants, and amplify the corresponding bands of the positive transformants.