

Table S1 Primers used for sequencing, gene expression, and gene transformation

| | Forward | Reverse | SNP primer |
|------------------------------|--------------------------------|----------------------------------|----------------------|
| <i>Ta PHS1</i> -GS | GCGACGAAGACCCGAGGAGG | GCACGACTGAATGAAAATCT | - |
| <i>TaPHS1</i> - P | CCTGCTTTTCTCTGGACGAG | CATCGAGTTGTGGAGCAAGA | - |
| <i>TaPHS1</i> -17F18 | TTCAGCACCGTGATAAGAGG | GGCGCTCAATTTTCATGTTGT | - |
| <i>TaPHS1</i> -18F18 | CAAGATATCGCAAATCGAAAGA | ACGACAGTGCTCCAA | - |
| <i>TaPHS1</i> -19F18 | TGCATGCTCGAAAGTTTGTG | CACCTAAGACCCAAC | - |
| <i>TaPHS1</i> -20F18 | ACATGGGGTGACATGAGCTA | TCACTGCGTGCGTTTTA | - |
| <i>TaPHS1</i> -21F18 | TACCGTGAGAGACACGCAAG | CCGTGACAAAACCT | - |
| <i>TaPHS1</i> -SNP1 (+646) | GTGAGAGACACGCAAGAACG | TTTGTACAGGTCGTCGTTGG | TGGAACAGATGCAACTAAAG |
| <i>TaPHS1</i> -SNP2 (+666) | GTGAGAGACACGCAAGAACG | TTTGTACAGGTCGTCGTTGG | GTTAGTACTTTATTTATGAC |
| <i>TaPHS1</i> -CDS | (P1) ATGTCCCGGTTTCGTTGATCCGCTG | (P6)TCAACGCCGGCGGTGTCCGGAC | - |
| <i>ACTIN</i> | ACCTTCAGTTGCCAGCAAT | CAGAGTCGAGCACAATACCAGTTG | - |
| AK330655 full length cDNA | TGTCCCGGTTTCGTTGATCCGCTG | TTTGAGCGCCAACGTCATGCTA | - |
| <i>TaPHS1</i> P1 and P2 | The same as P1 | (P2) TCTGTTCCACCCGGTATGTT | - |
| <i>Taphs1</i> - CDS (P3, P4) | (P3)GAGGTGGTGGACATGTTCTG | (P4)TGATCTTTAGTTGCATCTGTTCC | - |
| PHS1 P5 and P6 | (P5)TGTCCCGGTTCGTTGAT | (P6)CTAGGGCTAGGCGCGTCA | - |
| for RNAi and over-expression | | | |
| RNAi | RNAi-F TGCTCACCGACCAACAATAG | RNAi-R: TTTTTGAGCGCCAACGTC | - |
| | Gus-F1: CACGTAGTCCGCATCTTCA | Gus-R2: GTGGAGTGAAGAGTATCAGTGTGC | - |
| Bar | CCTGCCTTCATACGCTATTTATTTGC | CTTCAGCAGGTGGGTGTAGAGCGT G | - |