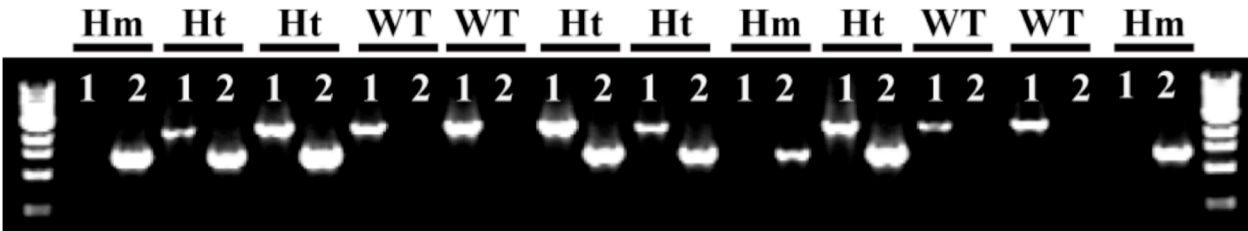


Supplemental Figure S1. In silico analysis of tissue-specific expression of MtPIN4, MtPIN5 and MtPIN10. Tissue-specific expression pattern of MtPIN4, MtPIN5 and MtPIN10 was analyzed using Affymetrix GeneChip Medicago Genome Array-based Medicago Gene Expression Atlas (<http://mtgea.noble.org/v2/>). Shown are the expression profiles of MtPin4, MtPIN5 and MtPIN10 in major organs including roots, nodules, stems, petioles, leaves, vegetative buds, flowers, seeds and seed pods with detailed developmental time series for nodules and seeds.



Supplemental Figure S2. Genotyping and linkage analysis.

Genomic DNA was extracted from the individual plant of the progeny from heterozygous MtPIN10 plant, MtPIN10-RT-F/Tnt1-F (lane 1) and MtPIN10-RT-F/MtPIN10-RT-R (lane 2) primer pairs were used to amplify the genomic DNA. Only MtPIN10-RT-F/MtPIN10-RT-R got amplification in wild-type, while in homozygous insertion mutant, only MtPIN10-RT/Tnt1-F got amplification, both primer pairs got amplification in heterozygous plant. Only the homozygous plants showed the abnormal phenotype, including abnormal phyllotaxy and flower development, deformed compound leaf, smooth leaf margins and plants being infertile.