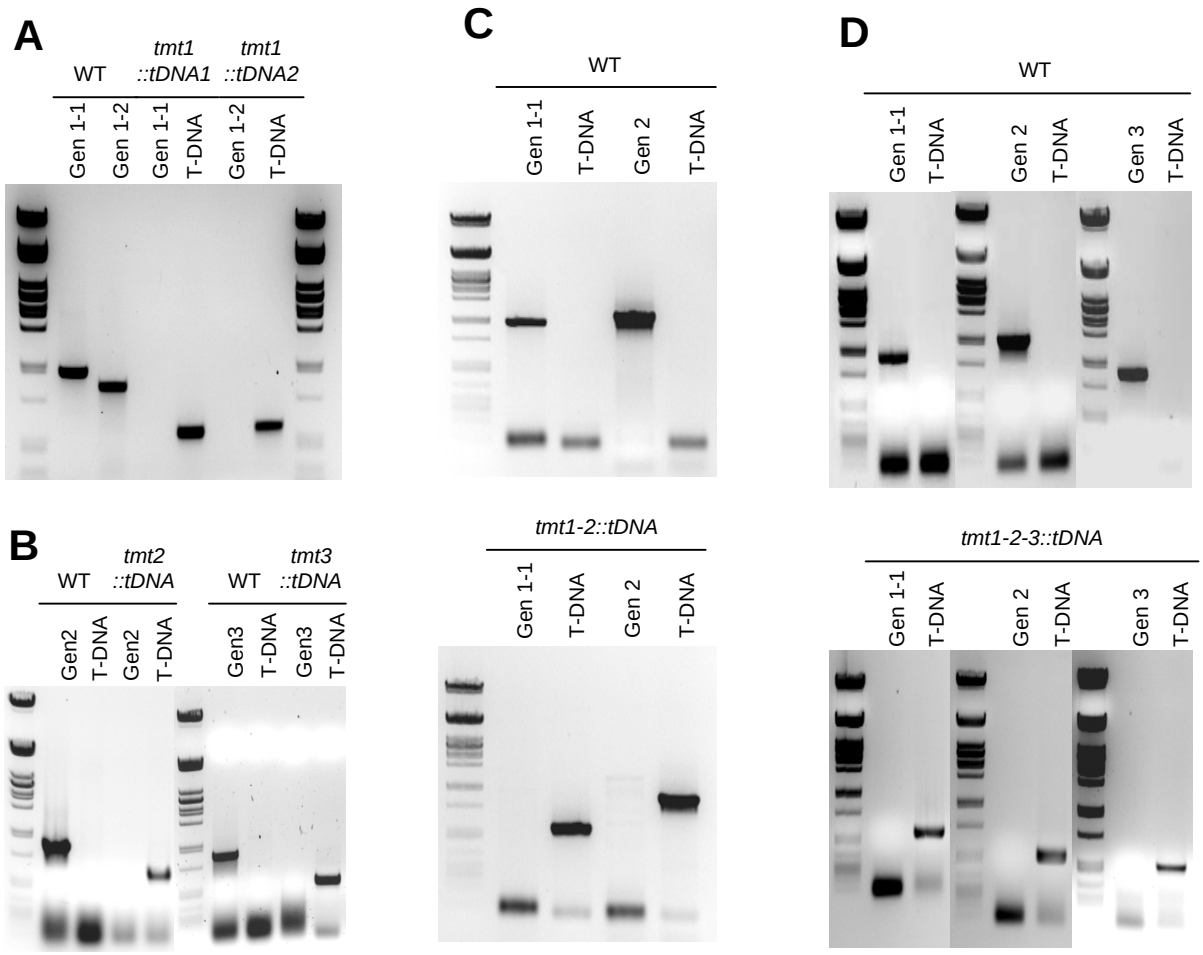
A
WT
tmt1 ::tDNA1
tmt1 ::tDNA2
Gen 1-1
Gen 1-2
Gen 1-1
T-DNA
Gen 1-2
T-DNA
B
WT
tmt2 ::tDNA
WT
tmt3 ::tDNA
Gen2
T-DNA
Gen2
T-DNA
Gen3
T-DNA
Gen3
T-DNA
C
WT
Gen 1-1
T-DNA
Gen 2
T-DNA
tmt1-2::tDNA
Gen 1-1
T-DNA
Gen 2
T-DNA
D
WT
Gen 1-1
T-DNA
Gen 2
T-DNA
Gen 3
T-DNA
tmt1-2-3::tDNA
Gen 1-1
T-DNA
Gen 2
T-DNA
Gen 3
T-DNA

Supplement Figure 4. PCR analysis using genomic DNA from WT-, *tmt1::tDNA1-, tmt1::tDNA2, tmt2::tDNA, tmt3::tDNA, tmt1-2::tDNA and tmt1-2-3::tDNA* plants.

The *Arabidopsis* knock out mutants *tmt1::tDNA1* and *tmt2::tDNA* were kindly provided by the Torrey Mesa Research Institute (TMRI). A second, independent *tmt1*-knock out line (designated *tmt1::tDNA2)* was bought from the GABI-KAT consortium (Max-Planck-Institute, Cologne, Germany) and a third knock out mutant *tmt3::tDNA* was provided by the SALK library. All knock out lines, Garlic 296-E01.b.1a.LB3Fb (*tmt1::tDNA1*), GABI-Kat 485707 (*tmt1::tDNA2*), Garlic_124_H03.b.1a.Lb3Fa (*tmt2::tDNA*) and SALK_027520 (*tmt3::tDNA*) were identified by PCR for T-DNA insertion within the gene region of the respective *TMT* isoform. Therefore, individual plants were screened by PCR using the gene- and T-DNA specific primer combinations indicated.

To identify the homozygous GARLIC knock out plant *tmt1::tDNA1* we used the gene-specific primers *WLP-1* (5'-GGCAAAGCTTTCTCATTTCCTCGTAATTG-3') and *WRP-1* (5'-AACGAGGAGACTCGGGCAAATAAAACACC -3'), and the T-DNA primer *LB-3* (5´-TAGCATCTGAATTTCATAACCAATCTCGATACA-3´). For identification of the knock out line *tmt1::tDNA2* we used the gene specific primers *WLP-1.2* (5'-AAATGCAGATGAGATGGCTTTACT -3') and *WRP-1.2* (5'-GTATTTG-AATGCCGACACCAACAAC-3'), and the T-DNA primer *LB-2* (5'-CCCATTTGGACGT-GAATGTAGACAC-3'). *TMT2* gene-specific primers are *WLP-2* (5'-GGAAATGCAG-TTCTCAGGCATCAACG-3') and WRP-2 (5'-GAGAAGAAGCGAGGAAAGACGCT-GAATTG-3'), the T-DNA primer *LB-3* (5'-TAGCATCTGAATTTCATAACCAATCTC-GATACA-3'). The following gene- and T-DNA specific primers were used for the identification of the knock out line *tmt3::tDNA*: *TMT3* gene-specific primers WLP-3 (5'-TTGTTGGTGTTGTTGTTGGCG-3') and WRP-3 (5'-TGTGTTTGGGATGTCGC-TTCA-3'), the T-DNA primer LBb1 (5'-GCGTGGACCGCTTGCTGCAACT-3'). The size standard used is a λ-*PstI* marker.

To generate double-knock out mutants (designated *tmt1-2::tDNA*) lacking the *tmt1* and *tmt2* gene, homozygous *tmt1::tDNA1* and homozygous *tmt2::tDNA* mutant plants were crossed. Double-knock out mutants have been identified by use of the primers given above. To obtain a null mutant (*tmt1-2-3::tDNA)* lacking all three functional *TMT* genes, the homozygous double-knock out line was crossed with the homozygous *tmt3::tDNA* mutant. Homozygous null mutants were identified by use of primers given above for PCR on genomic DNA.