

## Description of Additional Supplementary Files

File Name: Supplementary Data 1.

Description: The information of 5 candidate genes on chromosome 8 by BSA-analysis.

File Name: Supplementary Data 2.

Description: RNA-seq read statistics of WT and the *mpll-1* mutant.

File Name: Supplementary Data 3.

Description: Selected DEGs in RNA-Seq analysis of the *mpll-1* mutant and WT.

File Name: Supplementary Data 4.

Description: 656 significantly down-regulated genes in *mpll-1* mutant compared to WT.

File Name: Supplementary Data 5.

Description: 1002 significantly up-regulated genes in *mpll-1* mutant compared to WT.

File Name: Supplementary Data 6.

Description: PCR primer sequences used in this study.

File Name: Supplementary Data 7.

Description: Alignment of all identified MPL1 homologs from different species (To open this file, you need to rename it as a .aln file and then open it by ClustalX 2.1).

File Name: Supplementary Data 8.

Description: Data of a full Maximum likelihood tree of MPL1 homologs (To open this file, you need to rename it as a .nwk file, and then open it by MEGA7).