**Supplementary Figure 1**



SUPPLEMENTARY FIGURE 1 | Interaction between MLO10 and CaMs/CMLs. Co-expression MLO10-CT (Bait) and CaM2, CaM4, CaM6, CaM7, CML8, CML9, CML10, AD-Vector (Prey) in to AH109 strain, respectively. The transformants were cultured on SD-Leu/-Trp medium, and then transferred to SD-Leu/-Trp/-His (1.5 mM 3-AT) medium. Growth of yeast on SD/-Trp/-Leu/-His medium indicates interaction between the two tested proteins.

**Supplementary Figure 2**

**Fig S1-1.tif**

SUPPLEMENTARY FIGURE 2 | Analysis of the CaM-binding domain sequences of MLO10 protein. (A, B) Motif analysis of plant MLO families. The amino acid sequences of MLO proteins were obtained from GenBankTM data base searches. Motif Locations (A) and Discovered Motifs (B) were aligned by the MEME software (*http://meme-suite.org*). The GenBankTM accession numbers used in building the phylogenetic tree are as follows: HvMLO (Z83834), OsMLO (AF388195), AtMLO1 (Z95352), and AtMLO7 (AF369568), AtMLO10 (AF369571). Hv, *Hordeum vulgare;* Os, *Oryza sativa*; At, *Arabidopsis thaliana*. C. Alignment of the putative CaMBD sequence of MLO10 (Leu453 to Ala467) with the corresponding regions of MLO families that were demonstrated interacting with CaMs. HvMLO (Kim et al., 2002b; Bhat et al., 2005; Elliott et al., 2005; Bhat et al., 2006); OsMLO (Kim et al., 2002a); AtMLO1 (Kim et al., 2002b). The putative Ca2+-dependent CaM-binding motif of hydrophobic amino acids were indicated with black arrows (1-4-8-14 motif, as Kim described (Kim et al., 2002a)).

**Supplementary Figure 3**



SUPPLEMENTARY FIGURE 3 | Mutation screening of *MLO10* and *CML9*. (A) Structure of *MLO10* gene. The black and gray arrows showed the CRISPR-Cas9 mediated gene-editing positions of *mlo10-1* and *mlo10-2*, respectively. (B) Structure of *CML9* gene. T-DNA Insertion of *cml9-1* (SALK\_126787C) and *cml9-2* (SALK\_006380C). (C) *MLO10* genomic DNA from *mlo10-1* and *mlo10-2* could not be digested by restriction enzyme XhoI. (D, E) Mutations of *MLO10* in two different alleles (*mlo10-1* and *mlo10-2*). (F) Upper figure shows genomic DNA band of *CML9*, lower figure shows insertion of T-DNA. (G) Upper figure shows *CML9* band at RNA level, lower figure shows transcription level of *ACTIN2*.