

**Plant Communications, Volume 2**

**Supplemental information**

***Xa7*, a new executor *R* gene that confers durable and broad-spectrum resistance to bacterial blight disease in rice**

**Xifeng Chen, Pengcheng Liu, Le Mei, Xiaoling He, Long Chen, Hui Liu, Shurong Shen, Zhandong Ji, Xixi Zheng, Yuchen Zhang, Zhenyu Gao, Dali Zeng, Qian Qian, and Bojun Ma**

## Supplemental information

Figure S1 Bacterial-blight phenotype of F2 population used in Xa7 fine mapping.

Figure S2 Sequences homology of Xa7-mapping region in different varieties.

Figure S3 Identification of fragment deletion in *zsm-2* mutant.

Figure S4 Bacterial-blight resistant spectrum of the transgenic line C1.

Figure S5 Genomic sequence of Xa7 gene and its encoding protein.

Figure S6 Bacterial-blight resistance of IRBB7 under different temperatures.

Figure S7. Hyposensitive reaction (HR) triggered by Xa7 in tobacco leaves.

Figure S8 EBE sequences in Xa7 locus from different rice varieties.

Table S1 Transgenic plants of constructs C1 to C4.

Table S2 Transgenic plants of constructs C1S1 to C1S7, and C2S1.

Table S3 Identification of transgenic plants from CRISPR/Cas9 editing in target 1 of Xa7.

Table S4 Identification of transgenic plants from CRISPR/Cas9 editing in target 2 of Xa7.

Table S5. Primers sequences used in this study.

## Additional Supplementary Files

Sequences of the Xa7 mapping region from Zhen-hui 084.

Sequences of fragments in constructs used for transformation.

Information of varieties containing the Xa7 locus from the 3010 rice accessions.