



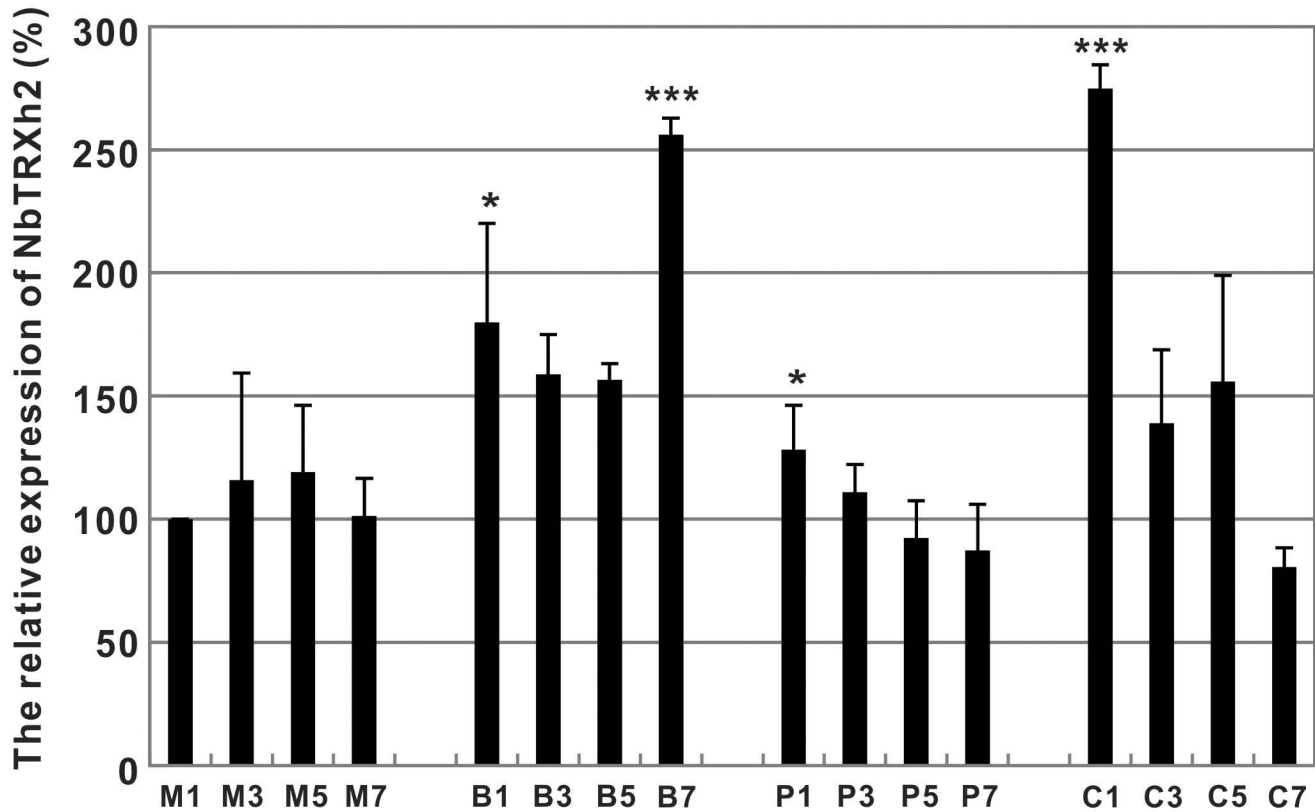
**Luc**

**PDS**

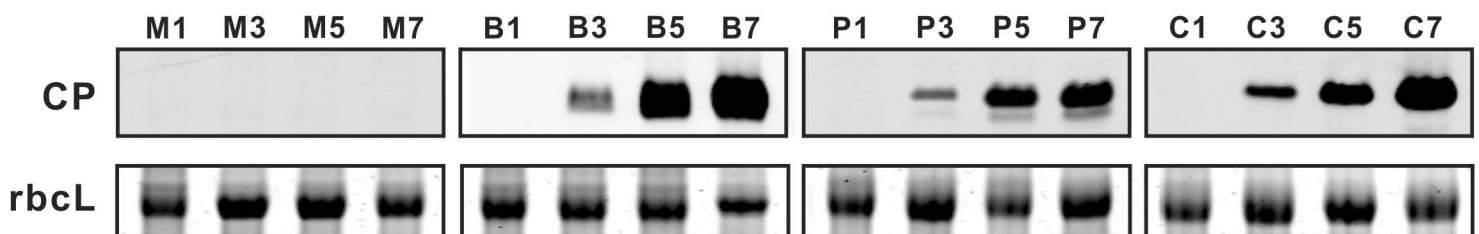
**NbTRXh2**



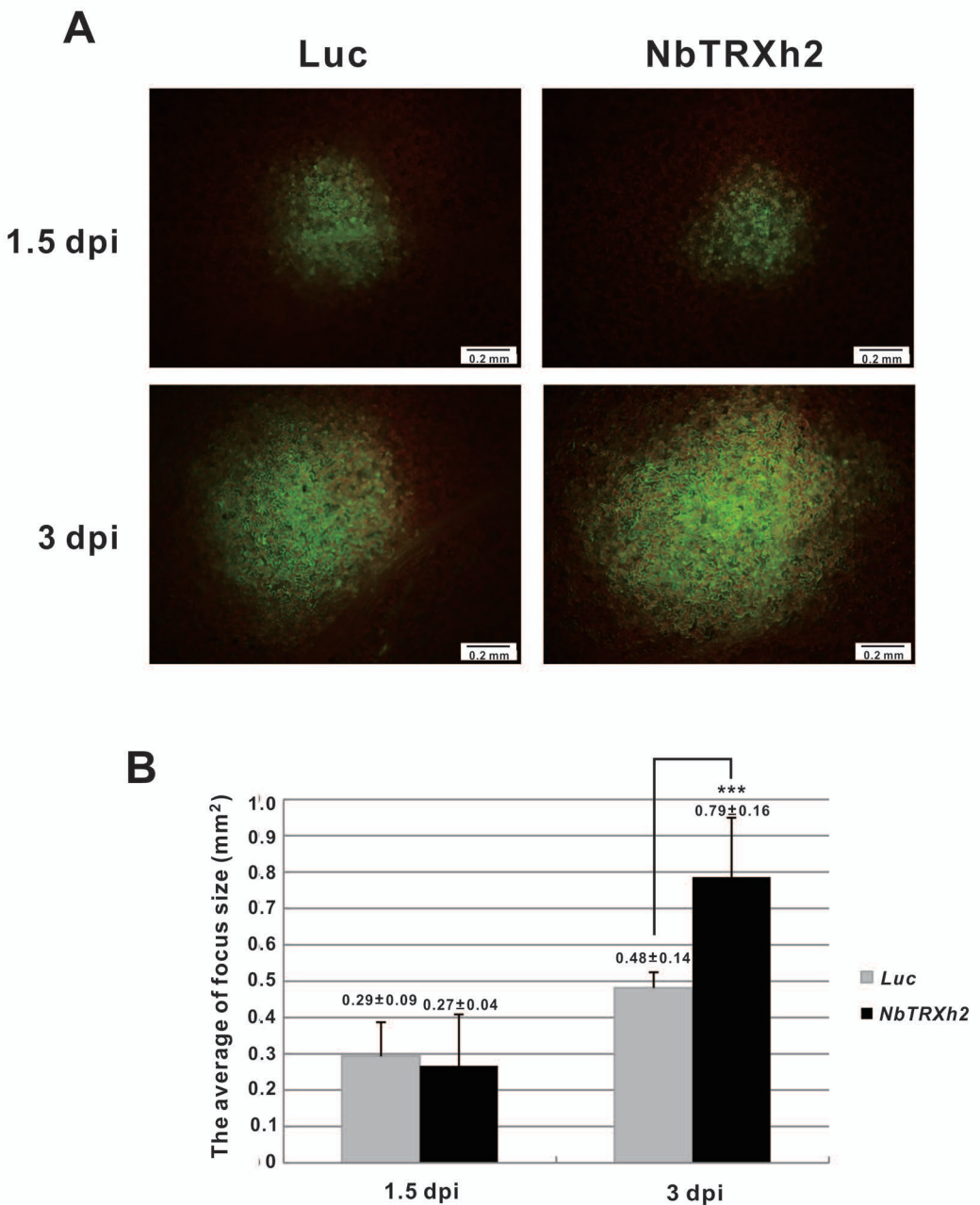
**Fig. S1** The morphology of the *NbTRXh2*-knockdown and control (*Luc*-knockdown) plants. No significant differences were observed between the *NbTRXh2*-knockdown and control plants. The positive control is the phytoene desaturase-knockdown plant indicated as PDS. The negative control is the luciferase-knockdown plant indicated as Luc.

**A**

	Mock	BaMV	PVX	CMV
1 dpi	100	180 ± 40	128 ± 18	275 ± 10
3 dpi	116 ± 43	159 ± 16	111 ± 11	139 ± 30
5 dpi	119 ± 27	157 ± 7	92 ± 15	156 ± 43
7 dpi	101 ± 15	256 ± 7	87 ± 19	81 ± 8

**B**

**Fig. S2** The expression profiles of NbTRXh2 and viral protein accumulation on *N. benthamiana* plants post virus inoculation. Four-week-old plants were inoculated with 500 ng of BaMV, PVX, or CMV. The total RNAs and proteins were extracted from the inoculated leaves at 1, 3, 5, and 7 days post inoculation (dpi) and used to determine the expression levels of NbTRXh2 by real-time RT-PCR in (A) and the accumulation levels of the viral coat protein (CP) by western blotting in (B). The numbers in the table shown under the statistic bars are the average and the standard deviation (n=3) of the relative expression of NbTRXh2. M: mock-; B: BaMV-; P: PVX-; and C: CMV-inoculated plants. The expression level of mock-inoculated plant (M1) was set as 100%. The Asterisks indicate statistically significant differences of the indicated group analyzed by the student T-test (\*  $P < 0.05$ ; \*\*\*  $P < 0.001$ ).



**Fig. S3** Cell-to-cell movement of BaMV in *Luc*- and *NbTRXh2*-knockdown plants. (A) The areas of GFP fluorescent foci on the pCBG (500 ng of the infectious BaMV cDNA viral vector which can express GFP)-inoculated *N. benthamiana* leaves (about 4 weeks old plants) at 1.5 and 3 days post inoculation was measured by fluorescent microscopy. Bar length=0.2 mm. (B) Statistic analysis of the results obtained from (A); Y-axis is the GFP focus size (mm<sup>2</sup>). The numbers shown above the statistic bar are the average and the standard deviation of 10 foci from *Luc*- and *NbTRXh2*-knockdown plants, respectively. Asterisks indicate statistically significant differences of the indicated group analyzed by the student T-test (\*\*\*)  $P < 0.001$ ).