

1 **Supporting experimental procedures**

2

3 **Methods S1**

4 **Plasmid construction**

5 For promoter-*GUS* analysis and complementation tests, Gateway compatible destination
6 vectors, *pEpi168::GW-p35S::GFP* and *pEpi308::GW-p35S::GFP*, were constructed as
7 follows: Genomic sequences of the *LjEXPA7* promoter regions (168 and 308 bp) were
8 amplified by PCR. Each fragment was digested with *DraI* and *SpeI* and then inserted
9 into the *HindIII* (blunt)-*SpeI* site of *p35S::GW-p35S::GFP* (*P35S:GFP-gw*; Banba *et al.*,
10 2008). For the construction of the *pEpi400::GW-p35S::GFP* vector, the genomic
11 sequence of the *LjEXPA8* promoter region (400 bp) was amplified by PCR. The
12 fragment was digested with *HindIII* and *SpeI* and then ligated with
13 *p35S::GW-p35S::GFP*. For co-transformation with *CCaMK* under the control of
14 *pEpi308* and an inactive truncated *CCaMK* under the control of *p35S*, a Gateway
15 compatible destination vector, *pEpi308::CCaMK-p35S::GW*, was constructed by
16 introducing the reading frame cassette C.1 (RfC.1) of the Gateway vector conversion
17 system (Invitrogen, Carlsbad, CA, USA) into the *XhoI* (blunt)-*XhoI* (blunt) site of
18 *pEpi308::CCaMK-p35S::GFP*. All primer sets used for construction are listed in Table
19 S2.

20 Information of entry clones of symbiotic genes and *GUSplus* (*GUS*⁺) and conversion
21 of these entry vectors into *pEpi* destination vectors are described below. cDNA
22 sequences of *NFR5* and *NUP85* were amplified by PCR and cloned into
23 pENTR/D-TOPO (Invitrogen, Carlsbad, CA, USA). cDNA sequence of *NUP133* was
24 amplified by PCR and digested with *SacII* and *AscI* and then inserted into the

1 SacII-AscI site of pENTR/D-TOPO. The entry clones constructed in this study, and
2 entry clones of *GUS*⁺ (Yano *et al.*, 2008), *NFR1* (Nakagawa *et al.*, 2011), *CASTOR*,
3 *POLLUX*, *CCaMK*, *CCaMK*^{T265D} (Banba *et al.*, 2008), an inactive truncated *CCaMK*
4 (*CCaMK1-340*) (Shimoda *et al.*, 2012), *CYCLOPS* (Yano *et al.*, 2008), *NSP1* (Yokota *et*
5 *al.*, 2010) and *NSP2* (Yokota *et al.*, 2010), were converted with the destination vector of
6 *pEpi308::GW-p35S::GFP* by the LR reaction (Gateway LR clonase II Enzyme Mix;
7 Invitrogen, Carlsbad, CA, USA).

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9 **Methods S2**

10 **RNA isolation from root hairs**

11 Surface-sterilized seeds were germinated on sterilized filter paper on 1.5% agar
12 containing half-strength B&D medium (Broughton and Dilworth 1971) in square plastic
13 plates (Eiken Chemical Co., Tokyo, Japan, <http://www.eiken.co.jp/>). The plastic plates
14 were incubated vertically for 2 days in a growth cabinet with a 16 h-day/8 h-night cycle
15 at 24°C, and then the seedlings were inoculated with a suspension of DsRed-labeled *M.*
16 *loti*. The plants were grown for an additional 2 days with the roots shielded from light.
17 The roots were then collected and dropped immediately into a 100-ml stainless steel
18 beaker filled with liquid nitrogen. The samples were stirred gently with a magnetic
19 stirrer for 20 min. In this step, the root hairs were cut off from the roots. The liquid
20 nitrogen containing root hairs was then filtered through a stainless testing sieve with a
21 mesh aperture of 500 µm. Liquid nitrogen was evaporated in a 50-mL sample tube and
22 root hairs were collected. The roots trapped by the testing sieve were also collected, as
23 “stripped roots”. Total RNAs were isolated by the CTAB method (Chang *et al.*, 1993)
24 with some modifications. Briefly, the collected root hairs or stripped roots were ground

1 to a fine powder in liquid nitrogen, immediately dissolved in the extraction solution (2%
2 CTAB, 100 mM Tris pH 9.5, 20 mM EDTA, 1.4 M NaCl, 1% 2-mercaptoethanol), and
3 then incubated at 65°C for 10 min. After two successive extractions with chloroform,
4 RNAs were precipitated using LiCl (final concentration 2.5 M) at -20°C overnight. The
5 precipitated RNAs were collected by centrifugation, and were dissolved in distilled
6 water. As necessary, the samples were further purified using an RNeasy Mini Kit
7 (Qiagen, <http://www.qiagen.com/>) according to the manufacturer's instructions.

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9 **References**

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