

Table 1 Suppl. The list of primers for PCR amplifications.

| Primer name | Sequence (5'-3')                |
|-------------|---------------------------------|
| LAS2        | CCAGGCAAGATTAGCCCCAGATGCCCTGTAG |
| LF6         | GTGCTCCAATTCCCTAGGGTTGCTG       |
| LAS10       | TAGCCGTTCCAATCCAGTTCTTA         |
| LF3         | CTTGATGAGAGTGGT                 |
| LR1         | GCCGTTCCAATCCAGTTCT             |
| LF1         | GAATGCTTGGGTGACCTC              |
| Actin F     | GTGCTAACGAATACAGTTACG           |
| Actin R     | CCAGCAGATGTGGATTCAAAG           |
| LAS11       | CCGGCCACCGAGCTGCTGCTCGACAAA     |
| LAS14       | GGATAAAAAGGAAGGAAGGGTTTGACAGAG  |
| PLF2        | CGGAAGCTTCTACATATGTGTGTTAGC     |
| PLR1        | GGGTCTAGAATAAAAAGGAAGGAAGGG     |

Table 2 Suppl. Putative *cis* regulatory motifs in the *FLL1* promoter sequence.

| No. | Name                  | Sequence 5' to 3' /Strand           | Function description   |
|-----|-----------------------|-------------------------------------|--|
| 1   | 5'UTR Py-rich stretch | TTTCTTCTCT / (+)                    | <i>cis</i> -acting element conferring high transcription levels        |
| 2   | AAGAA-motif           | GAAAGAA / (-)                       |  |
| 3   | ACE                   | GCGACGTACC / (-)                    | <i>cis</i> -acting element involved in light responsiveness            |
| 4   | AT1-motif             | AATTATTTTTATT / (+)                 | part of a light responsive module                                      |
| 5   | Box4                  | ATTAAT / (+)                        | part of a conserved DNA module involved in light responsiveness        |
| 6   | G-box                 | CACATGG / (-)                       | <i>cis</i> -acting regulatory element involved in light responsiveness |
| 7   | GATA-motif            | AAGGATAAGG / (+)                    | part of a light responsive element                                     |
| 8   | I-box                 | CCTTATCCT and<br>gGATAAGGTG / (+/-) | part of a light responsive element                                     |
| 9   | LTR                   | CCGAAA and CCGAC (-/+)              | <i>cis</i> -acting element involved in low-temperature responsiveness  |
| 10  | Skn-1_motif           | GTCAT / (-)                         | <i>cis</i> -acting element required for endosperm expression           |
| 11  | TCA-element           | CCATCTTTTT / (-)                    | <i>cis</i> -acting element involved in salicylic acid responsiveness   |
| 12  | Unnamed_4             | CTCC / (+/-)                        |  |
| 13  | As-2-box              | GATAatGATG / (-)                    | involved in shoot-specific expression and light responsiveness         |
| 14  | chs-CMA2a             | TCACTTGA / (-)                      | part of a light responsive element                                     |

Fig. 1 Suppl. Nucleotide and inferred amino acid sequences of *FLL1*. The nucleotide sequence is shown in lower case letters, whereas the amino acid sequence is in capital letters. Numerals at both ends of the nucleotide row indicate a nucleotide number. The first start codon (atg) is ***bold*** and the stop codon (tga) is marked with an *asterisk*, respectively. The putative polyadenylation signals are in *italics*. The serine, aspartic acid, and histidine residues that form the catalytic triad are in ***bold*** and *underlined*. The lipase consensus motif surrounding the active serine residue is *shaded*. *Arrows* represent sense (LF6, LF1, and LF3) and antisense (LAS10, LAS2, LR1, LAS11, and LAS14) primer sequences designed for 5' RACE, LD-PCR, RT-PCR, and promoter isolation. The overlapping region between 5' RACE and O65EST cDNA is *underlined*.

Fig. 2 Suppl. Multiple sequence alignment of FLL1 against the top four *BLASTX* hits in the *NCBI* sequence database. The ‘:’ denotes conservation of strong groups. The ‘.’ denotes conservation of weak groups, whereas those without any symbol denote no consensus (*CLUSTWALW*, Biology Workbench Version 3.2, the University of California). The lipase consensus motif is boxed, whereas the serine, aspartic acid, and histidine residues that forms the putative catalytic triad is marked with the ‘^’.

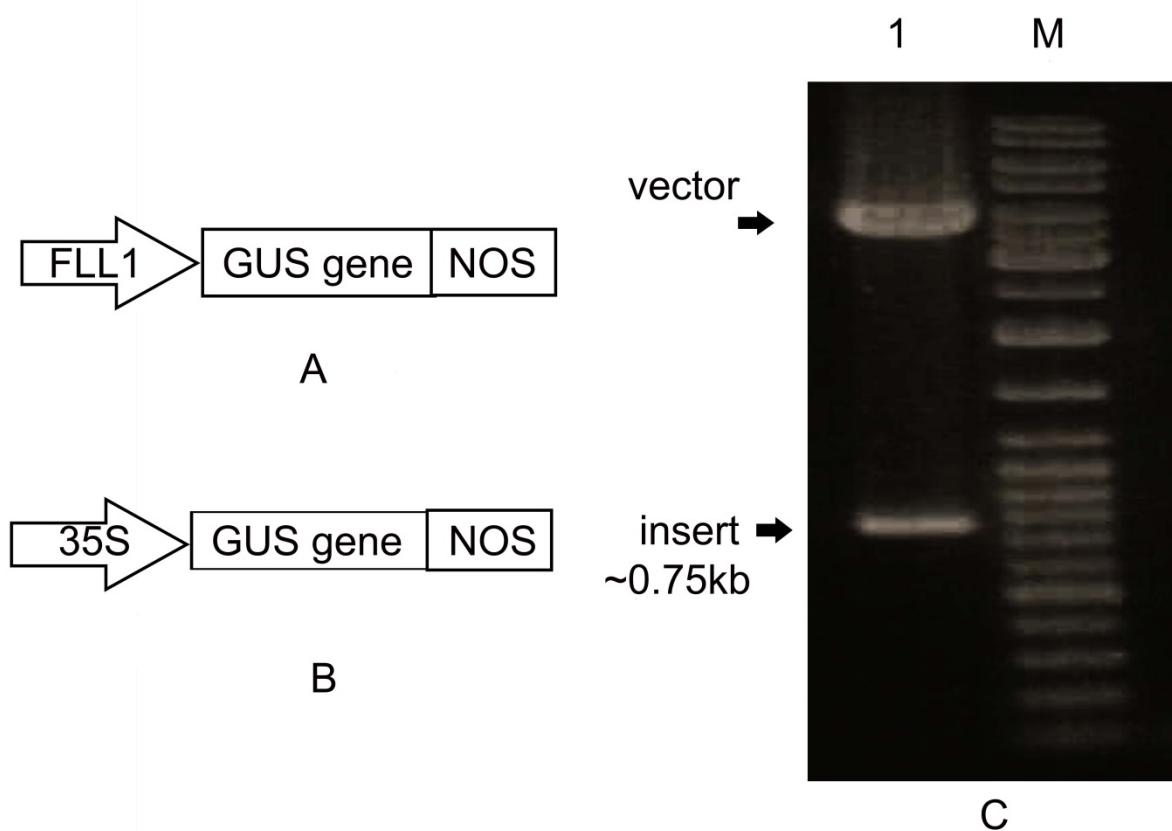


Fig. 3 Suppl. A schematic diagram of the FLL1GUS plasmid (A), pBI221 plasmid (B), and HindIII-Xba1 digestion of a transformation vector pBI221 carrying the FLL1 promoter on 1 % (m/v) agarose gel electrophoresis (C).