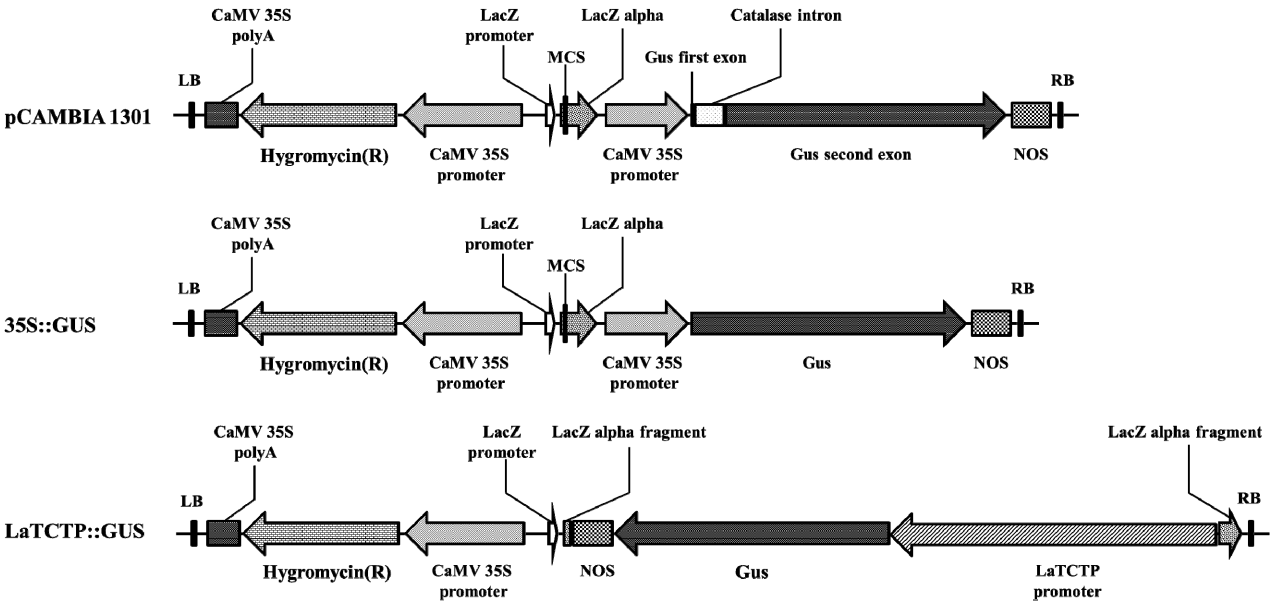

Figure S1. Physical map of T-DNA region of the binary plasmids pCAMBIA1301, 35S::GUS and pLaTCTP::GUS used for genetic transformation of *Larix kaempferi.* LB, left border; RB, right border.

Figure S2. Schematic diagram of the improved vacuum filter. It consists of a Buchner funnel with 400 mesh stainless steel screens instead of filter paper and a micro vacuum pump.

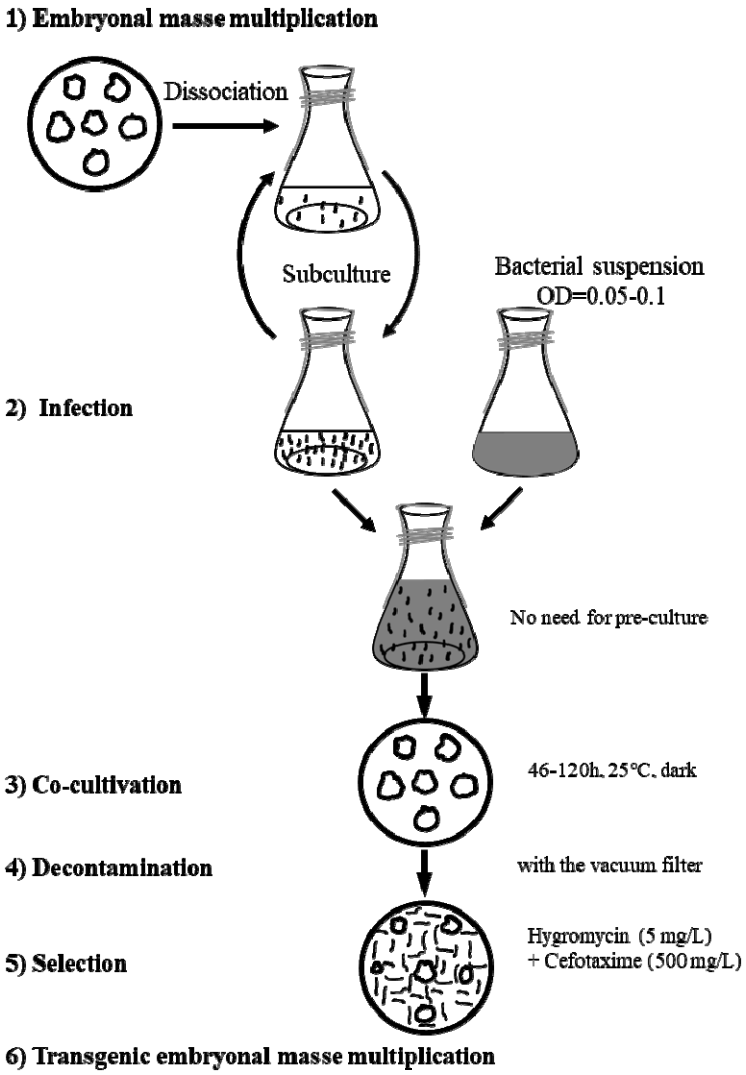

Figure S3. Principle of the simplified protocol for genetic transformation of *Larix kaempferi*.

Figure S4. Development of hygromycin-resistant embryonal masses derived from line S287 co-cultivated with *A. tumefaciens* GV3101 harboring the binary vector pCAMBIA1301 on selective medium (supplemented with hygromycin 5mg/L) after 60 day of culture. The brown tissue is the dead embryonic cell after selecting.

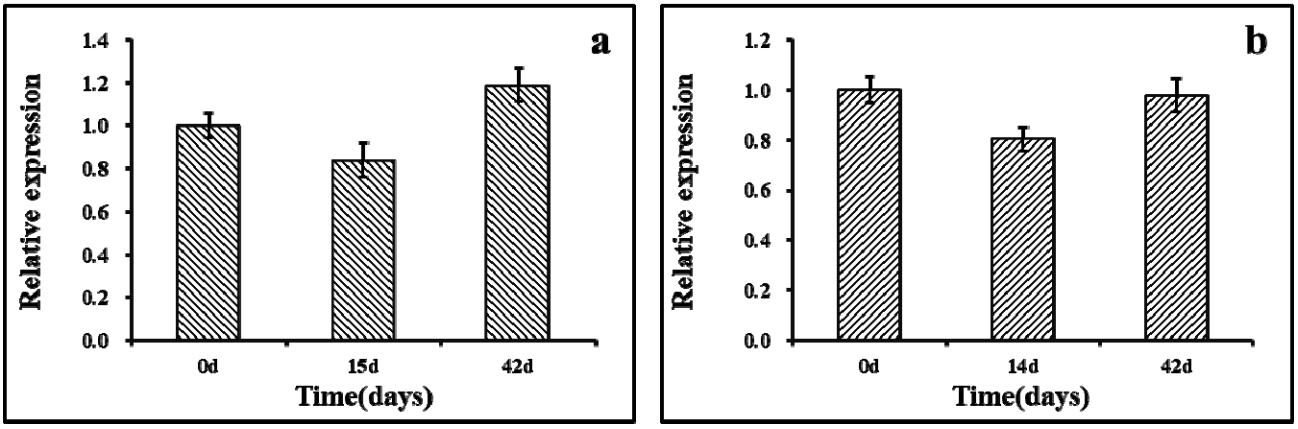

Figure S5. Accumulation of *GUS* transcripts at different developmental stages of somatic embryos from transgenic cell lines P2 (a) and P5 (b).

Figure S6. Development of hygromycin-resistant embryonal masses derived from line S287 co-cultivated with A. tumefaciens GV3101 harboring the binary vector 35S::GUS on selective medium (supplemented with hygromycin 5mg/L) after 60 day of culture. The brown tissue is the dead embryonic cell after selecting.

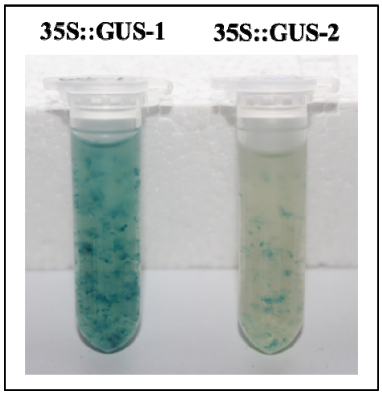

Figure S7. Histochemical staining for GUS activity in transgenic lines 35S::GUS-1 and 35S::GUS-2.

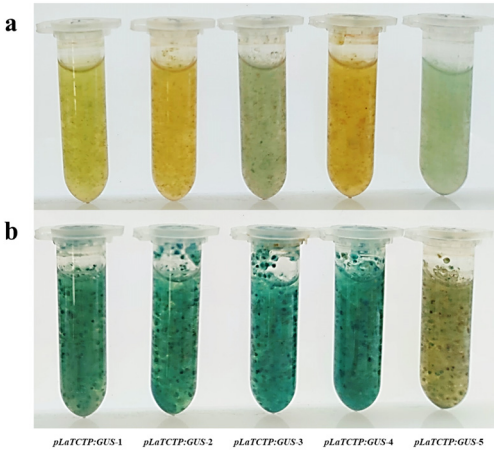

Figure S8. GUS staining in the transgenic lines *pLaTCTP:GUS*. (**a**) Embryogenic tissues, (**b**) Early embryos cultured for 15 days.