

Additional file 1: Figure S1. Schematic representation and confirmation of recombination strains. (A) Gene disruption of *genK* and *genP* (B) Expression of *kanJ* and *kanK* by site specific intergration. (C) Expression of *kanJ* and *kanK* with the promoter *PermE** (D) Expression of *kanJ* and *kanK* with the native promoter of *genP* (E) Expression of *kanJ* and *kanK* with promoter *PhrdB*.

Figure S1 Schematic representation and confirmation of recombination strains. (A) Gene disruption of *genK* and *genP*

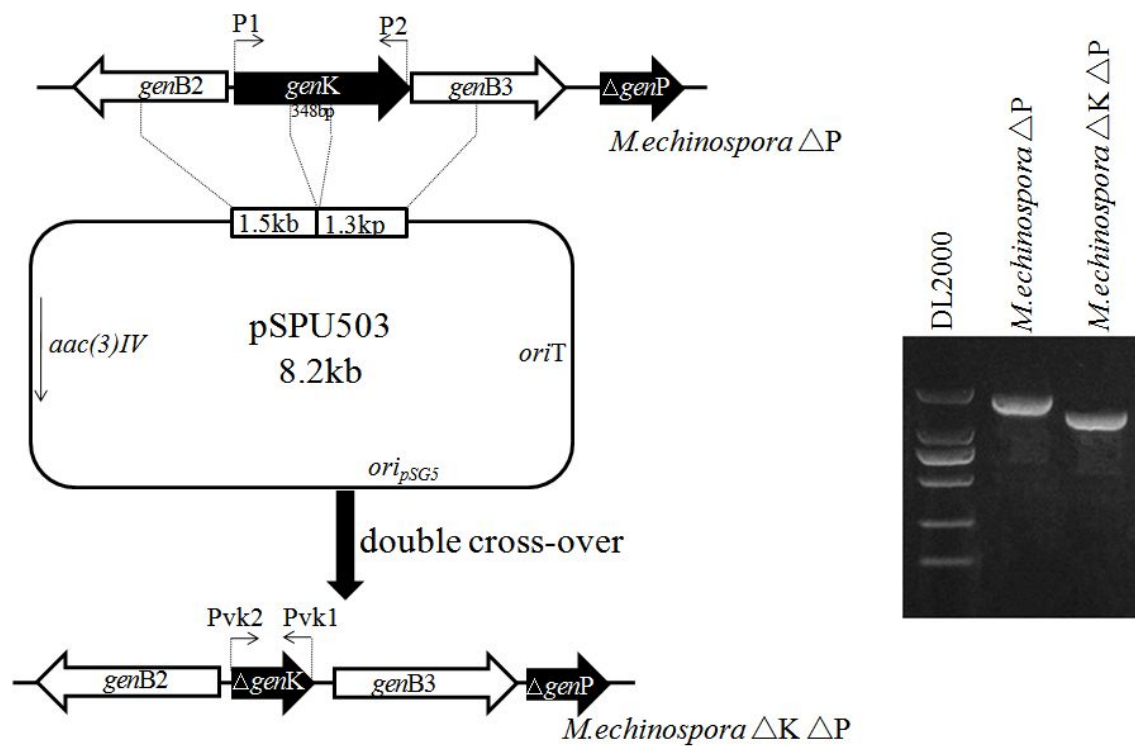


Figure S1 Schematic representation and confirmation of recombination strains. (B)

Expression of *kanJ* and *kanK* by site specific intergration.

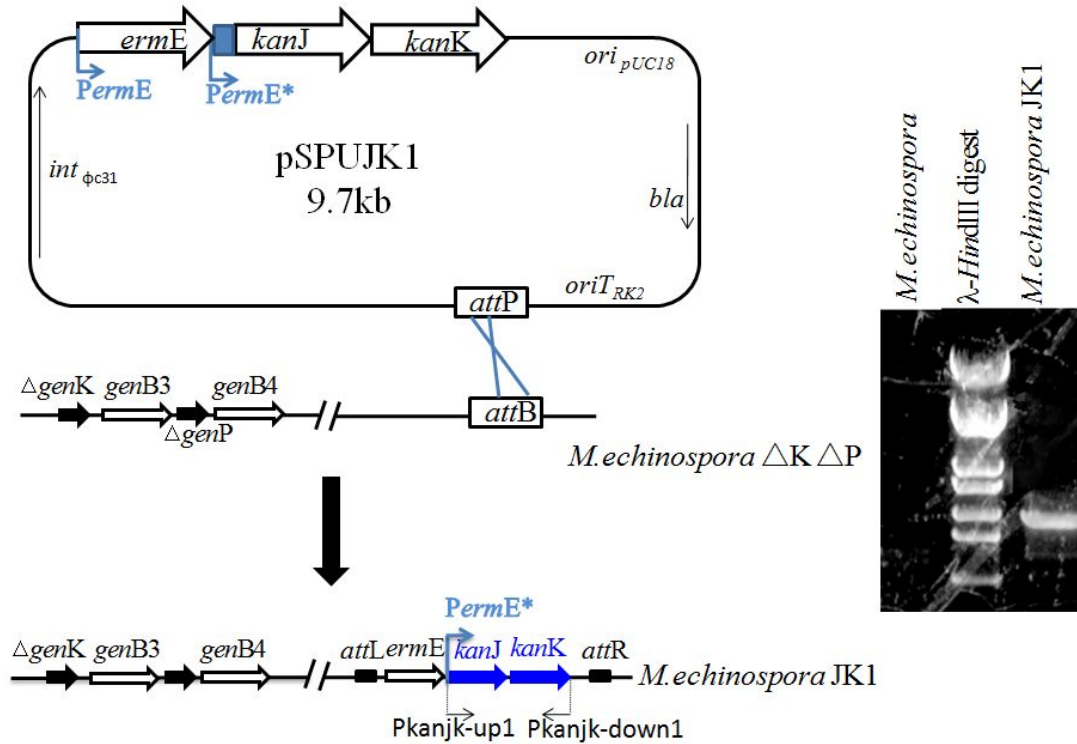


Figure S1 Schematic representation and confirmation of recombination strains. (C)

Expression of *kanJ* and *kanK* with the promoter *Perme**.

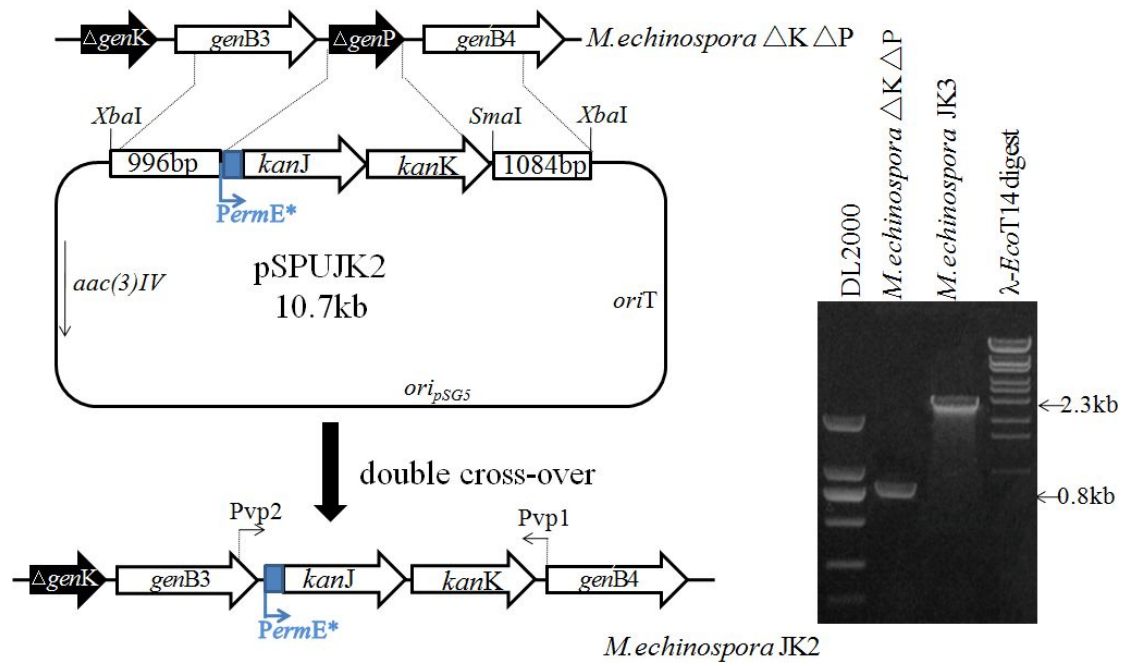


Figure S1 Schematic representation and confirmation of recombination strains. (D)
 Expression of *kanJ* and *kanK* with the native promoter of *genP*.

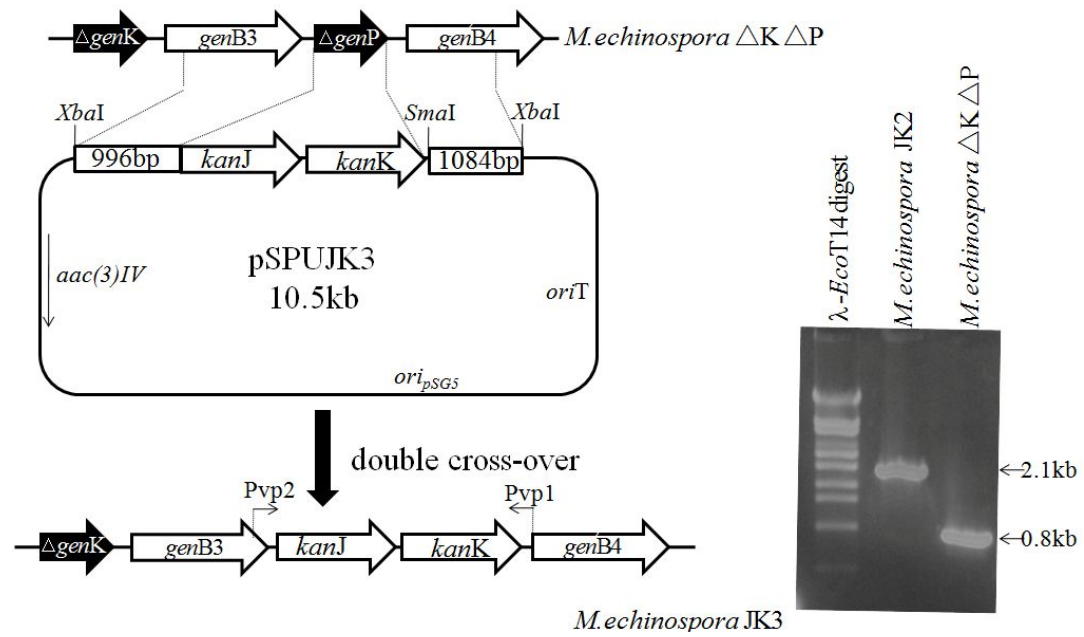


Figure S1 Schematic representation and confirmation of recombination strains. (E)

Expression of *kanJ* and *kanK* with promoter *PhrdB*.

