



Figure S1 Confirmation of the isogenic mutant Δstk and the complementary strain $C\Delta stk$. (A) **Confirmation of the Δstk and $C\Delta stk$ by RT-PCR.** Lanes 1-4 represent the amplification of *stk* using the primer set *stk*-F and *stk*-R. Lanes 5-8 represent the amplification of downstream gene of *stk* using the primer set 0427-F and 0427-R. Lanes 9-12 represent the amplification of upstream gene of *stk* using the primer set 0429-F and 0429-R. Lanes 1, 5 and 9 use cDNA of SC-19 as templates, lanes 2, 6 and 10 use cDNA of Δstk , whereas lanes 3, 7, 11 use cDNA of $C\Delta stk$. Lanes 4, 8, 12 represent the negative control. (B) **Confirmation of the Δstk and $C\Delta stk$ by Western blot analysis.** The supernatant of cell lysate from SC-19, Δstk and $C\Delta stk$ were disposed for immunoblot analysis with STK or GidA polyclonal antibodies. An antibody directed against GidA was used as loading control.