



**Figure S3.** PCR identification and Southern blot analysis of *FGSG\_01403* deletion mutants.

(A) Amplified with primer pair 01403-JDF1/01403-JDR1 (left) and primer pair Fg16F/Fg16R (right).

(B) Amplified with primer pair TEF-F/TEF-R (left) and primer pair 01403-JDF2/01403-JDR2 (right).

(C) Amplified with primer pair 01403-1F/HYR.

(D) Amplified with primer pair YGF/01403-4R.

(E) Southern blots analysis of transformants using the *FGSG\_01403* gene (left) and *hph* gene (right) as probes, respectively.

Codes numbers above the panel correspond to the wild-type strain PH1 and *FGSG\_01403* deletion mutant codes. Lane M, DNA marker; Lane C, negative control (omitting DNA template).