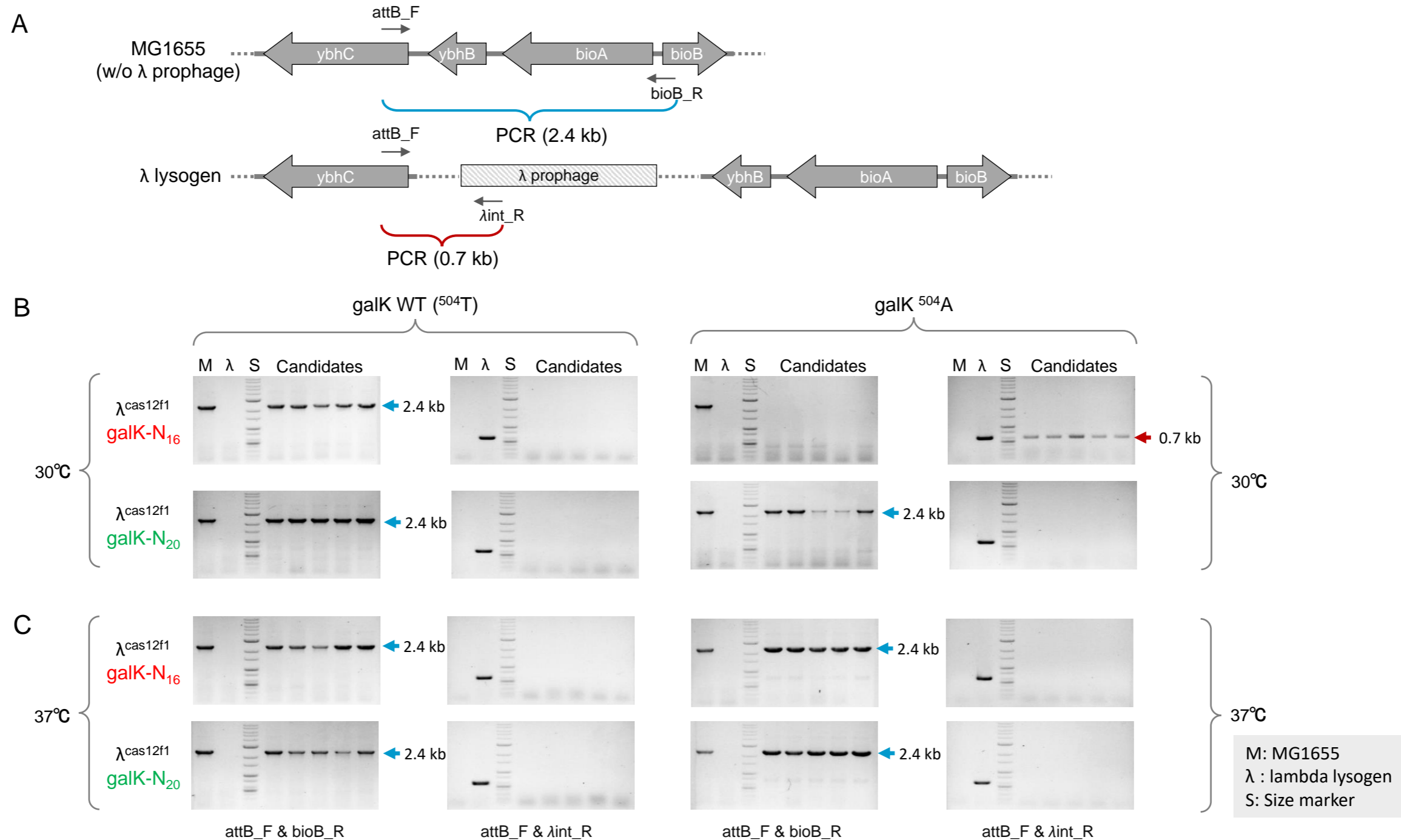


**Fig. S6**



**Fig. S6.** Confirmation of lysogen formation in *galK* WT and *galK*<sup>504A</sup> cells infected with  $\lambda^{\text{cas12f1}}$  *galK*-N<sub>20</sub> or  $\lambda^{\text{cas12f1}}$  *galK*-N<sub>16</sub> phages at 30°C and 37°C.

(A) Locations of PCR primers on the genome that distinguish between *E. coli* MG1655 and  $\lambda$  lysogenic MG1655 cells. The gray arrows represent the PCR primers, and the sizes of the PCR products formed by each primer are indicated.

(B) Confirmation of  $\lambda$  lysogen formation using PCR in colonies obtained by spreading cultures of *E. coli* *galK* WT and *galK*<sup>504A</sup> cells, which were infected with  $\lambda^{\text{cas12f1}}$  *galK*-N<sub>20</sub> or  $\lambda^{\text{cas12f1}}$  *galK*-N<sub>16</sub> phages and regrown at both 30°C and 37°C. Blue arrows indicate the absence of  $\lambda$  prophage in the *E. coli* genome, while red arrows signify the presence of  $\lambda$  prophage in the genome. Five colonies were selected in each case, and PCR reactions using two primer pairs (*attB\_F* + *bioB\_R* and *attB\_F* + *lambda int\_R*) were performed for each colony.