



## Supplemental Material to:

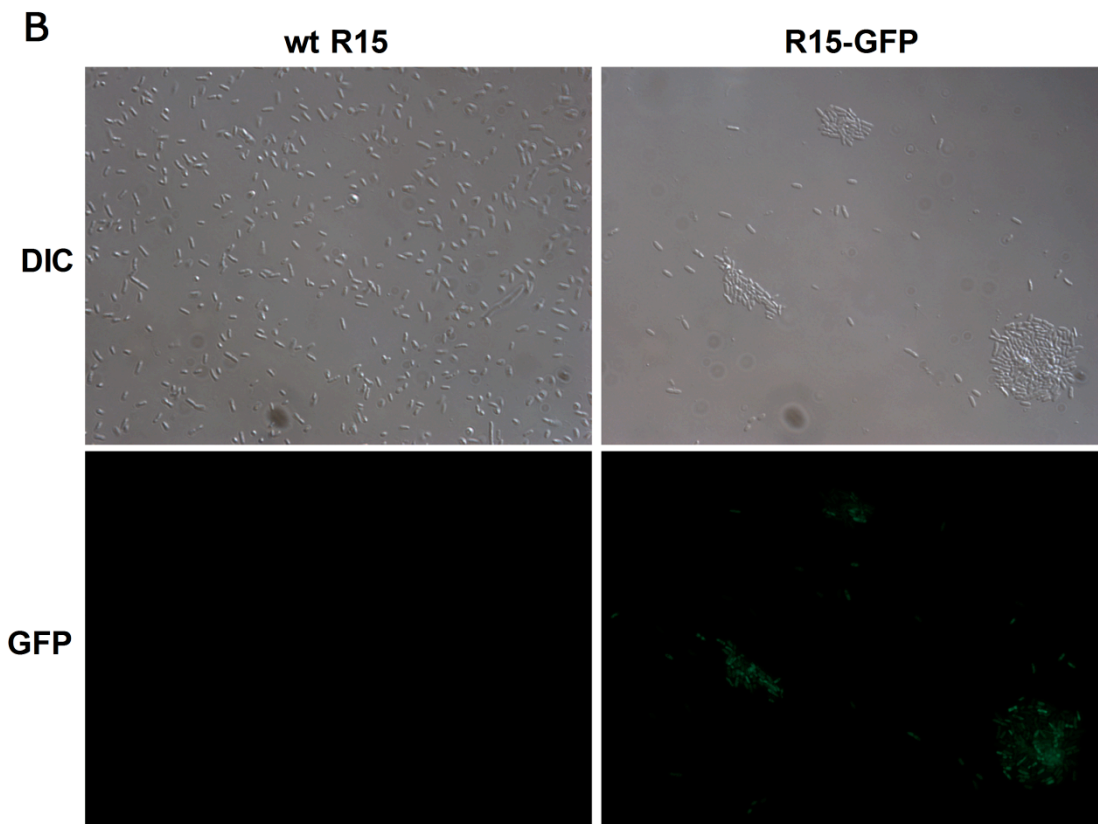
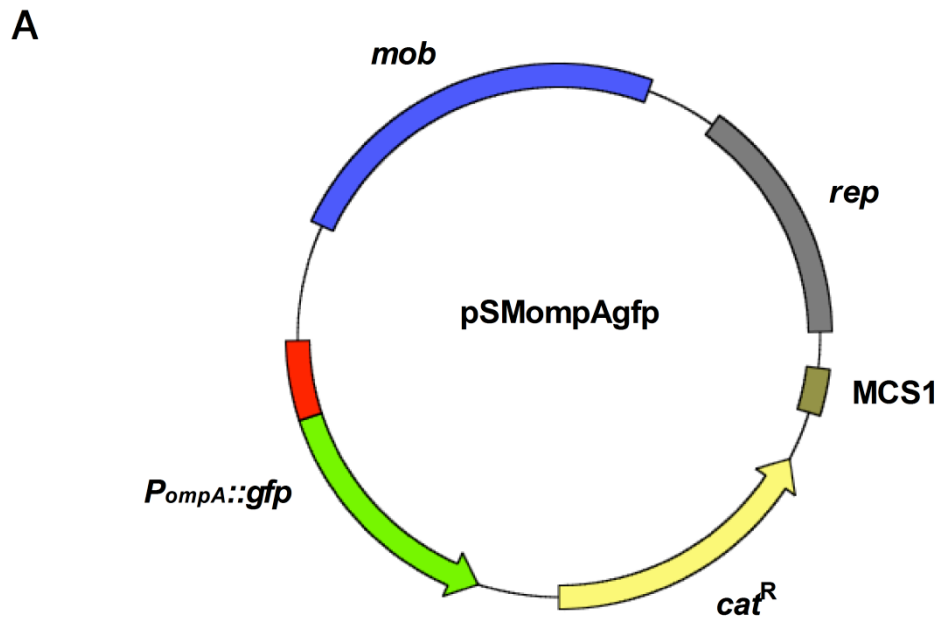
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*Burkholderia pseudomallei* kills *Caenorhabditis elegans*  
through virulence mechanisms distinct from intestinal  
lumen colonization

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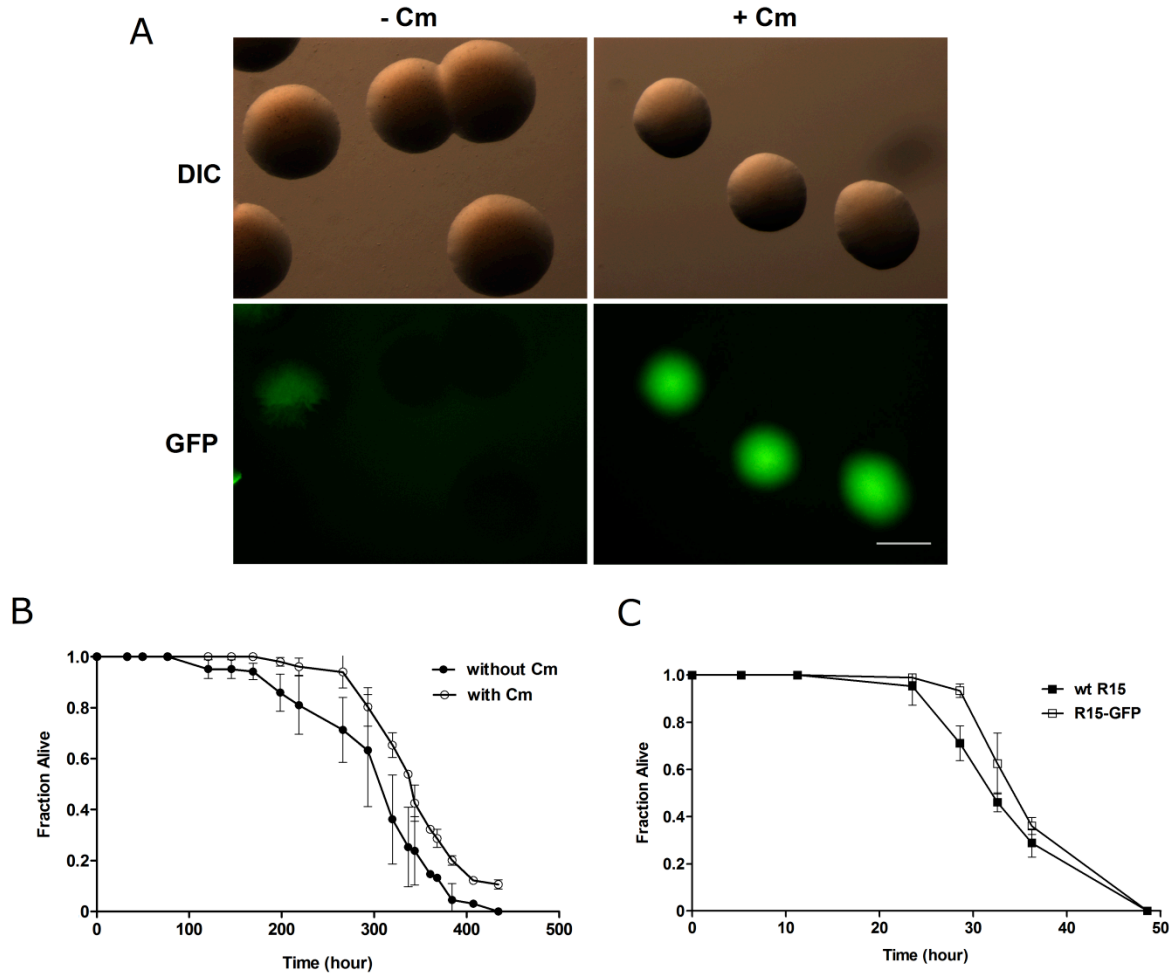
<http://www.landesbioscience.com/journals/virulence/article/21808/>



**Figure S1.** *B. pseudomallei* R15 electroporated with pSMompAgfp constitutively expresses GFP. (A) Shown is the map of pSMompAgfp, refer to **Table 1** for additional information.

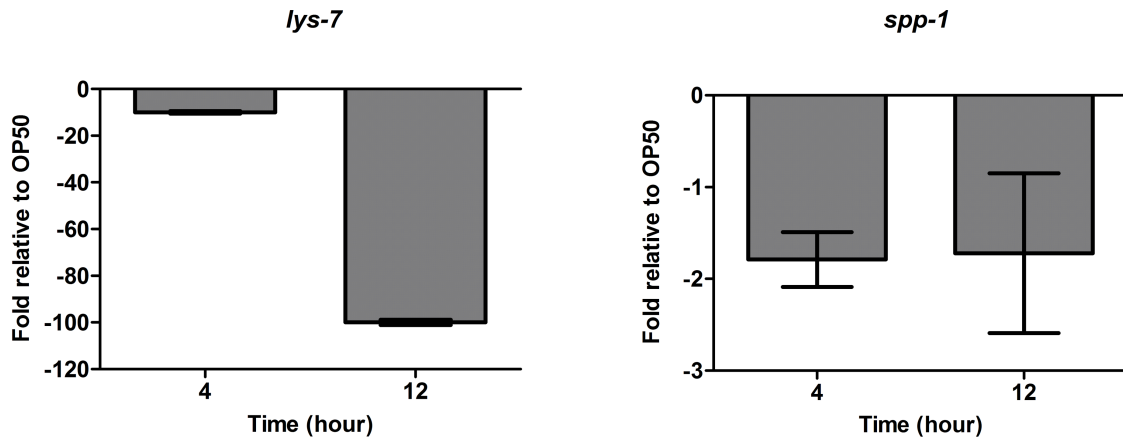
Abbreviations: *mob*, mobilization gene; *rep*, origin of replication; MCS1, multiple cloning site 1; *cat*<sup>R</sup>, chloramphenicol acetyltransferase gene (confers chloramphenicol resistance phenotype).

(B) Representative photomicrographs of wild-type *Bp* R15 and R15-GFP captured under DIC optics and GFP2 filter cube at 1000x magnification, showing that R15-GFP specifically expresses GFP *in vitro*.



**Figure S2.** Assessment of the suitability of R15-GFP as a surrogate strain for *Bp* R15. (A) Loss of fluorescence observed in R15-GFP colonies after a passage of cells without chloramphenicol (Cm) selection showed that pSMompAgfp was unstable in *Bp* R15. Nevertheless, the bright green fluorescence was retained with the supplementation of Cm. Shown are photomicrographs taken at 100x magnification with the scale bar represents 200  $\mu\text{m}$ . (B) The addition of 100  $\mu\text{g/ml}$  Cm in OP50/NGM plates did not compromise the lifespan of worms. As live *E. coli* is pathogenic to aged nematodes, the extension of the curve with open circles is likely due to bacteriostatic effect of Cm. (C) R15-GFP displays *C. elegans* N2 killing kinetics similar to *Bp* R15 on NG/Cm agar, validating the use of pSMompAgfp in reporting colonizing bacteria within

*C. elegans*. Graphs in (B) and (C) show the mean  $\pm$  S.D. of alive worm fraction from a sample size of 120 worms.



**Figure S3.** *Bp* R15 did not significantly colonize the *C. elegans* intestinal lumen despite its ability to suppress the expression of host antimicrobial peptide genes. Bars correspond to the mean  $\pm$  S.D. of fold change levels of host *lys-7* (left) and *spp-1* (right) genes of infected worms relative to *E. coli* OP50-fed worms at 4 and 12 hours post-infection.