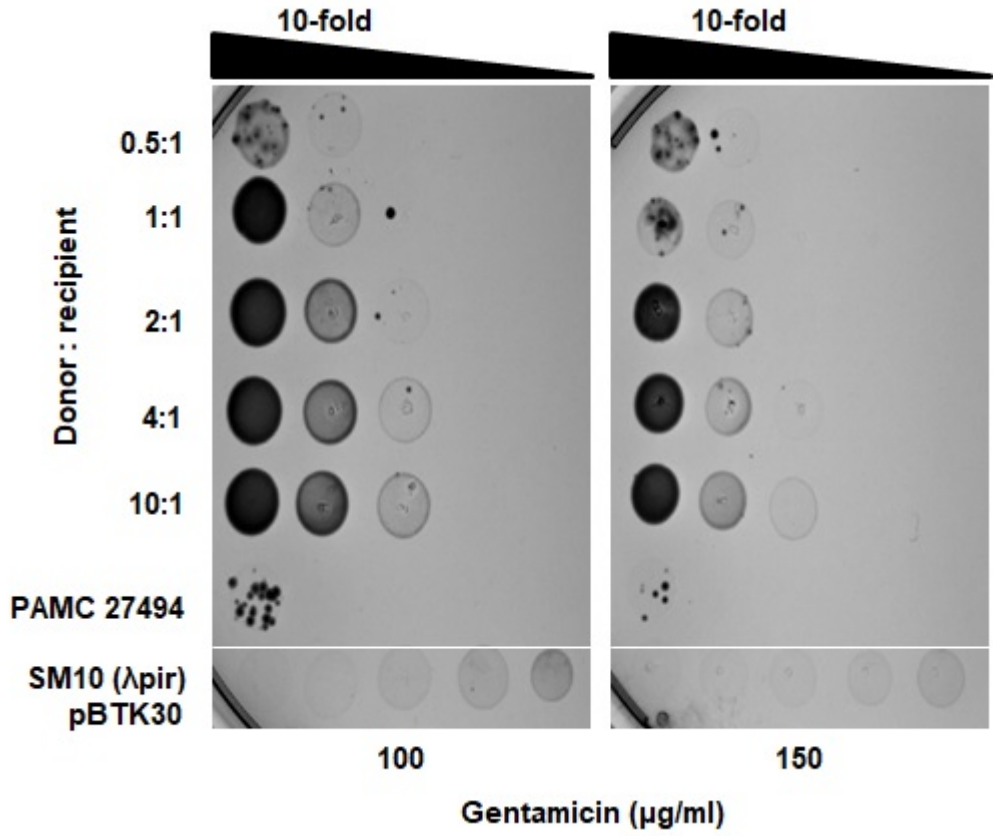
[Supplemental Information]



Supplement Figure S1. Conjugation efficiency at low gentamicin concentrations

The conjugation efficiency at low gentamicin concentrations in the selection plate was tested.



Supplement Figure S2. Sanger sequencing result of inverse-PCR products

Transposon insertion site was determined by inverse PCR and subsequent Sanger sequencing. The genomic locus in *P. antarctica* containing transposon was highlighted in yellow and transposon region was not highlighted.