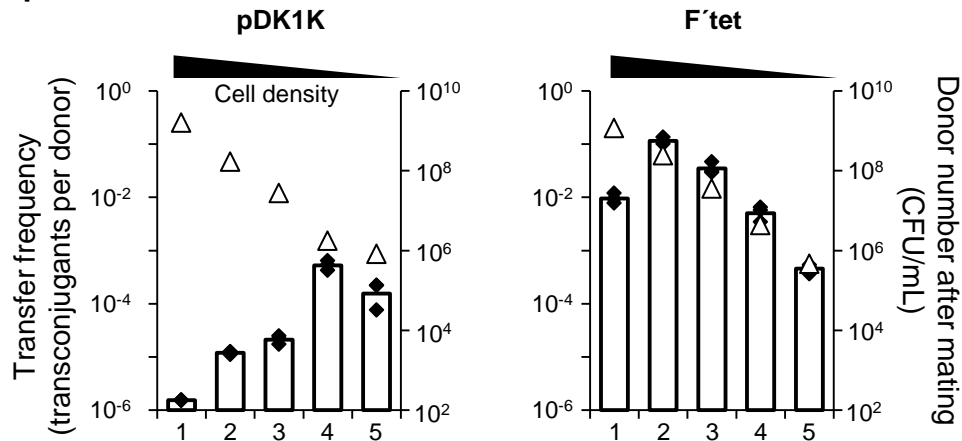


Supplementary Fig. S1

A: Liquid



B: Solid surface

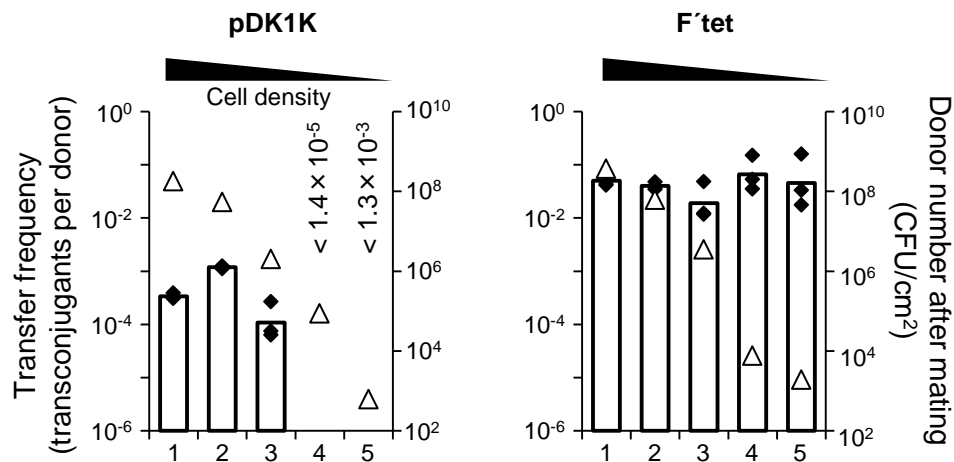


Fig. S1. Transfer frequency of pDK1K and F'tet according to cell density.

Pseudomonas fluorescens Pf-5S and *P. fluorescens* Pf-5G cells were used as donors and recipients of pDK1K, respectively (Yano *et al.*, 2010, *J. Bacteriol.*, 192:4337-47). *E. coli* BM21 (Pasteur Institute) and *E. coli* QC774 (National BioResource Project, Japan) cells were used as donors and recipients of F'tet (Pasteur Institute), respectively, based on a previous report (Zhong *et al.*, 2005, *Plasmid*, 54:48-56). The OD₆₀₀ values of donors and recipients were adjusted with LB [donor: recipient ratios, 2 × 10⁰: 2 × 10¹ (1), 2 × 10⁻¹: 2 × 10⁰ (2), 2 × 10⁻²: 2 × 10⁻¹ (3), 2 × 10⁻³: 2 × 10⁻² (4), 2 × 10⁻⁴: 2 × 10⁻³ (5)] before mixing; the identical ratio of donor to recipient cells (1:10) were used in each cell density. Mixtures were incubated in microtubes (liquid mating; A) or on a solid surface (filter mating; B) for 3 h at 30°C (pDK1K) or 1 h at 37°C (F'tet). Bars show the mean transfer frequencies (transconjugants/donor) calculated from triplicate spots of serially diluted mixtures. Filled diamonds show the frequencies calculated from each spot. Open triangles indicate the numbers of donor cells after mating. All experiments were performed at least twice.