Supplemental Figure legends

Figure S1. Genetic map of pESBL.
Genetic map of pESBL with annotations used in this study. The circular map was linearized between *repZ* and *hp2* for clarity, and the coordinates are shown below. Genes essential for the maintenance of pESBL are indicated in pink and genes critical for pESBL transfer are indicated in blue. High frequency transfer region is indicated in yellow box

Figure S2. Shufflon region of R64 and pESBL.
The shufflons from the ESBL plasmids from two distinct O104:H4 isolates (2011C-3493, the isolate whose sequence we used here, and TY-2482 (9)) were compared to that in R64. The annotations of the 2 pESBL plasmids were based on homologies to the R64 shufflon region. pESBL of TY-2482 (pTY1) *pilV* appears to have truncated in its C-terminus due to duplication of 34-nt (ACGAAAGTATTGCCCCTGTATTATCGCGGCCTAC).

Figure S3. Deletion of M.EcoGIX from pESBL does not alter growth of the host strain or plasmid stability.
A) To compare the growth of MC1061/pESBL and MC1061/pESBLΔGIX, overnight cultures were diluted 1:200 in triplicate and then incubated for 12 hours at 37ºC with agitation in a SynergyHT microplate reader (BioTek, Winooski, VT). Representative results from 5 (wild type) and 6 (ΔGIX) experiments are shown.
B) To compare the stability of pESBL and pESBLΔGIX, E. coli MC1061 harboring wild type or ΔGIX pESBL cells were grown in LB medium without selection. At various time intervals, aliquots of cells were spread on LB plates and transferred into fresh LB to maintain exponential growth. 100 colonies from each time point were patched on to LB plates containing ampicillin to gauge the presence of pESBL. The X-axis on the graph depicts cell generations (incubation time divided by doubling time).

Figure S1. Yamaichi et al

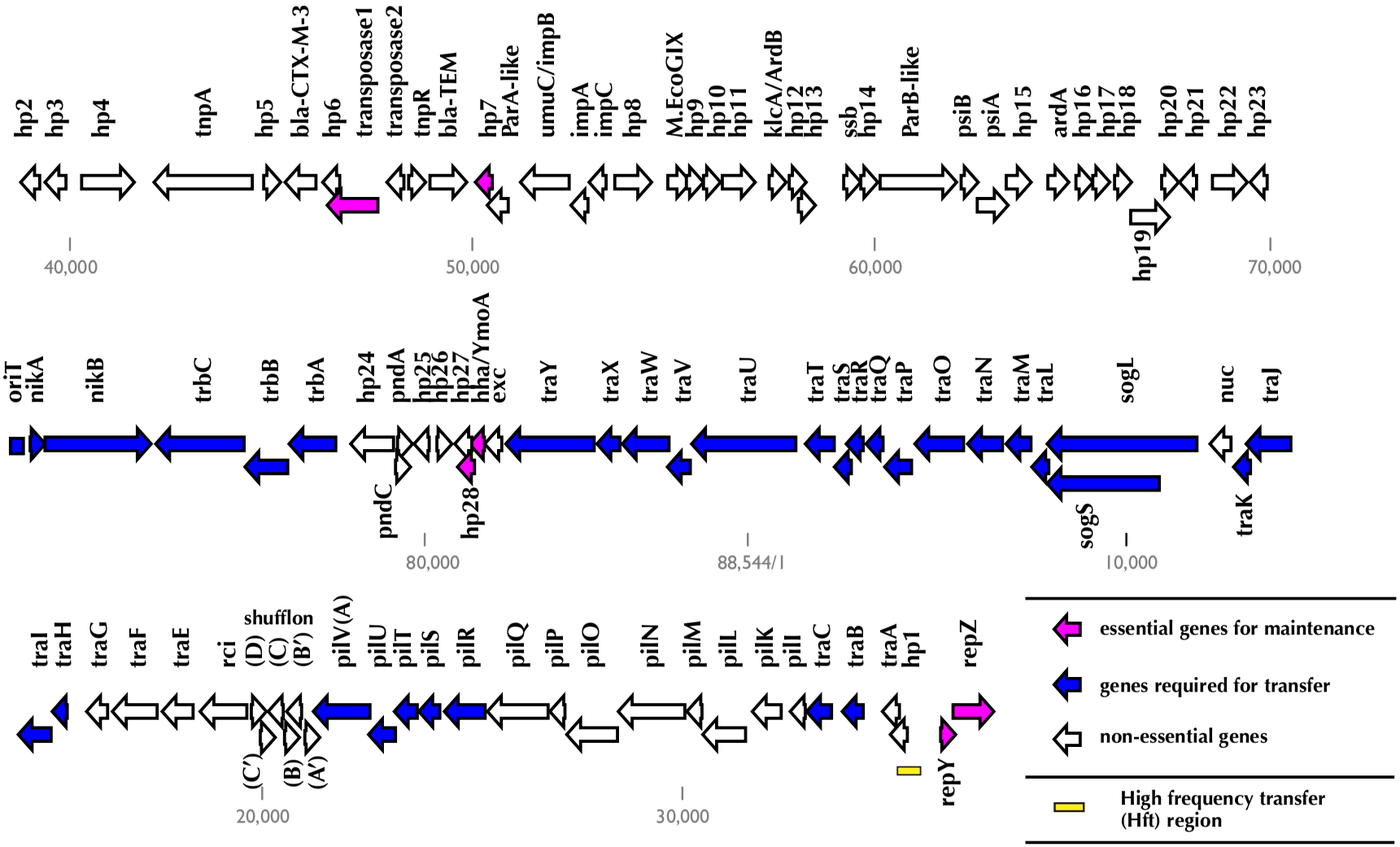

Figure S2. Yamaichi et al.

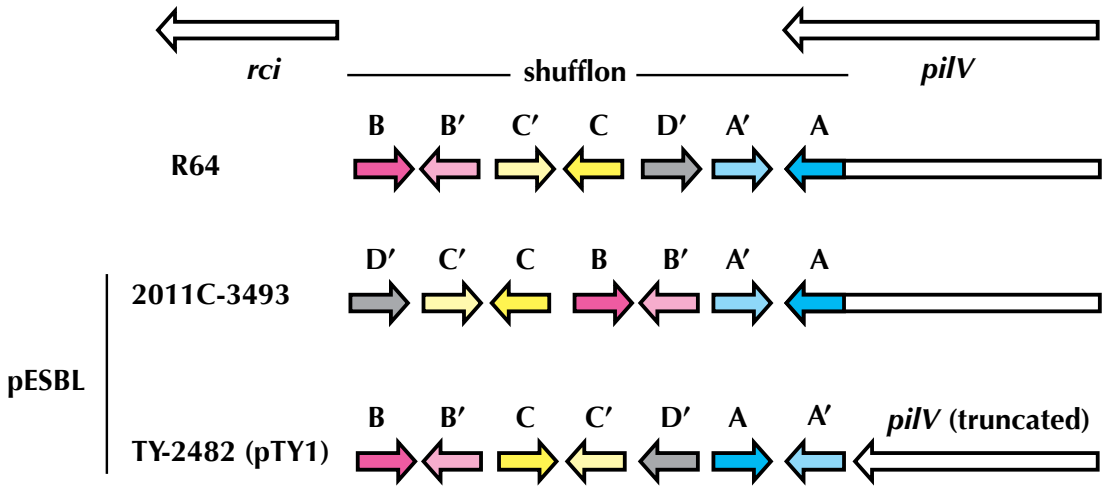

Figure S3. Yamaichi et al.