

Supplementary Figure S1. Construction of the genome structure of *T. kodakarensis* TS-ZLE033 (Δ TK0582).

The gene organizations in plasmid pZLE033 and in the *T. kodakarensis* TS517 genome are shown above the genome of the intermediate strain generated by transformation of *T. kodakarensis* TS517 with pZLE033 DNA and homologous recombination (dotted lines) into the *T. kodakarensis* TS517 genome. In the intermediate strain, the TK0664-TK0254 expression cassette replaced TK0582 and was flanked by direct repeats of TK0581 and TK0580. A spontaneously 6-methylpurine resistant (6MP^R) derivative of the intermediate strain was isolated and shown to have undergone deletion of TK0664 by homologous recombination within the TK0581-TK0580 duplication (indicated by the dotted lines). This isolate was designated *T. kodakarensis* TS-ZLE033 (Δ TK0582).

