



The pKLAC1 expression vector. pKLAC1 (9091 bp) contains the 5' and 3' ends of the LAC4 promoter ($P_{LAC4-PBI}$) separated by DNA encoding β -lactamase (Ap^R) and the pMB1 origin (ori) to allow for its propagation in *E. coli*. The *K. lactis* α -mating factor secretion leader sequence (α -MF), multiple cloning site (MCS), and the LAC4 transcription terminator (TT) lie immediately downstream of 3' $P_{LAC4-PBI}$. The yeast ADH2 promoter (P_{ADH2}) drives expression of an acetamidase selectable marker gene ($amdS$). The vector can be linearized by digestion with Sac II or BstX I to create a linear DNA fragment capable of inserting into the native LAC4 promoter region of the *K. lactis* genome.