



**Figure S2.** Schematic representing the construction of the pNZPldhFfluc and pNZSTldhFfluc luciferase expression plasmids. Relevant features are indicated, including restriction sites and PCR primers used for cloning; the *E. coli*/LAB *repA* and *repC* replication genes; the chloramphenicol acetyltransferase (*cat*) gene conferring resistance to chloramphenicol; the *Pldh* promoter from the *L. plantarum* 423 lactate dehydrogenase gene and the *STldh* promoter from the *E. mundtii* ST4SA lactate dehydrogenase gene.