

Figure S3. Sucrose induces gtfW, but maltose is the substrate for GTFW. (A) A gtfW transcriptional reporter was constructed by fusing the click beetle luciferase downstream of the gtfW promoter on a plasmid, followed by introduction into L. reuteri (strain LMW 501). Expression of gtfW was monitored throughout growth in MRS, with or without the indicated additions by removing a 100 μ l aliquot every hour, and measuring the OD_{600nm} . An additional 80 μ l aliquot was removed and added to 20 μ l of 2 mM D-luciferin and allowed to incubate at RT for 5 min, followed by luminescence detection. (B) GTFW enzymatic activity. Proteins extracted from S. mutans, L. reuteri WT, L. reuteri $\Delta gtfW$ (strain LMW 500), and E. coli harboring gtfW on an inducible plasmid (Ec) (strain LMW 502), were subjected to SDS-PAGE followed by PAS staining to examine GTFW enzymatic activity. 5% sucrose or 5% maltose were used as substrates. The arrows indicate GTFW activity.