

**Figure S3:** Intracellular carbohydrate, as measured by the anthrone assay, of *niff* ( $\square$ ) and WT ( $\diamond$ ) cultures over 4 days of fermentation. After 4 days of fermentation, WT cells catabolized  $31 \pm 14$  mol carbohydrate per  $10^{17}$  cells and *niff* cells catabolized  $26 \pm 5$  mol carbohydrate per  $10^{17}$  cells.

