# Materials and methods

## Metabolite quantification

Dataset 2 from Tian et al. 2017 (Tian et al., 2017) was used. Briefly, a single 200 ml culture was grown to an OD600 of 0.1, the culture was split in half. Starting at 2 hours (post split), ethanol was added to one culture at a rate of about 9 g/L/h. No ethanol was added to the other culture. At 3 timepoints (T=2.0h, 3.8h and 5.9h), each culture was sampled twice for intracellular metabolites using previously described protocols (Olson et al., 2016; Rabinowitz and Kimball, 2007; Tian et al., 2017), and once for extracellular metabolites (supplemental table BBB).

The raw data was re-processed with El-Maven 0.5.0 and quantified using external standards (supplemental figure AAA). Since the response was not linear over the full range of the standards (0.1 µM to 100 µM), quantification was performed by piecewise linear interpolation.

# Results and discussion

## Description of metabolite dataset

Dataset 2 from Tian et al. 2017 (Tian et al., 2017) was used. This dataset represents intracellular metabolites collected from WT *C. thermocellum* growing with and without the presence of added ethanol.