

S4 Fig. Effect of the extraction solvent composition on observed <sup>12</sup>C:<sup>13</sup>C ratio. (A) Four different <sup>12</sup>C/<sup>13</sup>C SCFA standard mixed solutions, containing <sup>12</sup>C-acetate, <sup>12</sup>C -propionate and their corresponding <sup>13</sup>C-counterparts were prepared, with a <sup>12</sup>C:<sup>13</sup>C concentration ratio of 0.5, 1, 2 and 5, in five different reaction/organic solvents, namely H<sub>2</sub>O/ACN (50:50, v/v), H<sub>2</sub>O/ACN (20:80, v/v), H<sub>2</sub>O/MeOH (50:50, v/v), H<sub>2</sub>O/MeOH (20:80, v/v) and H<sub>2</sub>O/MeOH/ACN (20:40:40, v/v). Dashed line represents a slope = 1. Error bars represent standard deviation, averaged data for the two tested standards (acetate and propionate). (B) Regression line equations and r<sup>2</sup> corresponding to plots in (A).