



**Figure S6. HPLC analysis of the product of the reaction catalyzed by L-iLDH.** (a), authentic L-lactate; (b), authentic pyruvate; (c) the reaction mixture after 4 h. To determine the L-lactate oxidation product of the L-iLDH in *P. stutzeri* SDM, biotransformation was carried out using L-lactate (10 mM) and MTT (5 mM) as the substrate and purified L-iLDH as the biocatalyst in 50 mM Tris-HCl (pH 7.5) at 30°C. After 4 h of reaction, the mixture was centrifuged at  $20,000 \times g$  for 15 min. The supernatant was analyzed by a HPLC system (Agilent 1100 series, Hewlett-Packard, USA) equipped with an Aminex HPX-87H column (Bio-Rad). The mobile phase (10 mM H<sub>2</sub>SO<sub>4</sub>) was pumped at  $0.4 \text{ ml min}^{-1}$  (55°C). As shown in Figure S6c, a compound identical to authentic pyruvate was produced. Similar to other reported L-iLDH, the L-iLDH in *P. stutzeri* SDM also catalyzes the conversion of L-lactate into pyruvate.