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**Biosynthetic ability of diverse basidiomycetous yeast strains to produce the natural antioxidant ergothioneine**

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Fig. S1. Effect of culture conditions on EGT production by (A) *U. siamensis*, (B) *U. shanxiensis*, and (C) *M. antarcticus*.

Cells were cultivated in yeast mold (YM) medium modified with indicated conditions for 5 days (n=1). EGT inside cells was measured by liquid chromatography-mass spectrometry (LC-MS) as described in Materials and Methods. Dotted lines show the EGT production level in YM medium (containing 10 g/L glucose, 5 g/L peptone, 3 g/L yeast extract, and 3 g/L malt extract) at 25oC and 200 rpm for 120 h by each strain as the standard condition. Final concentrations of glucose, yeast extract, and peptone were shown. Salinity was modified with the addition of NaCl. Initial pH of YM medium was adjusted by 1 M HCl or 1 M NaOH. Tr, trace (less than 1 mg/L)