

Additional File 1

Comprehensive Characterization of Toxicity of Fermentative Metabolites on Microbial Growth

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Figure S1: Growth kinetics of *E. coli* exposed to eight short-chain alcohols at various concentrations including (A) ethanol, (B) propanol, (C) isopropanol, (D) butanol, (E) isobutanol, (F) pentanol, (G) isopentanol, and (H) hexanol

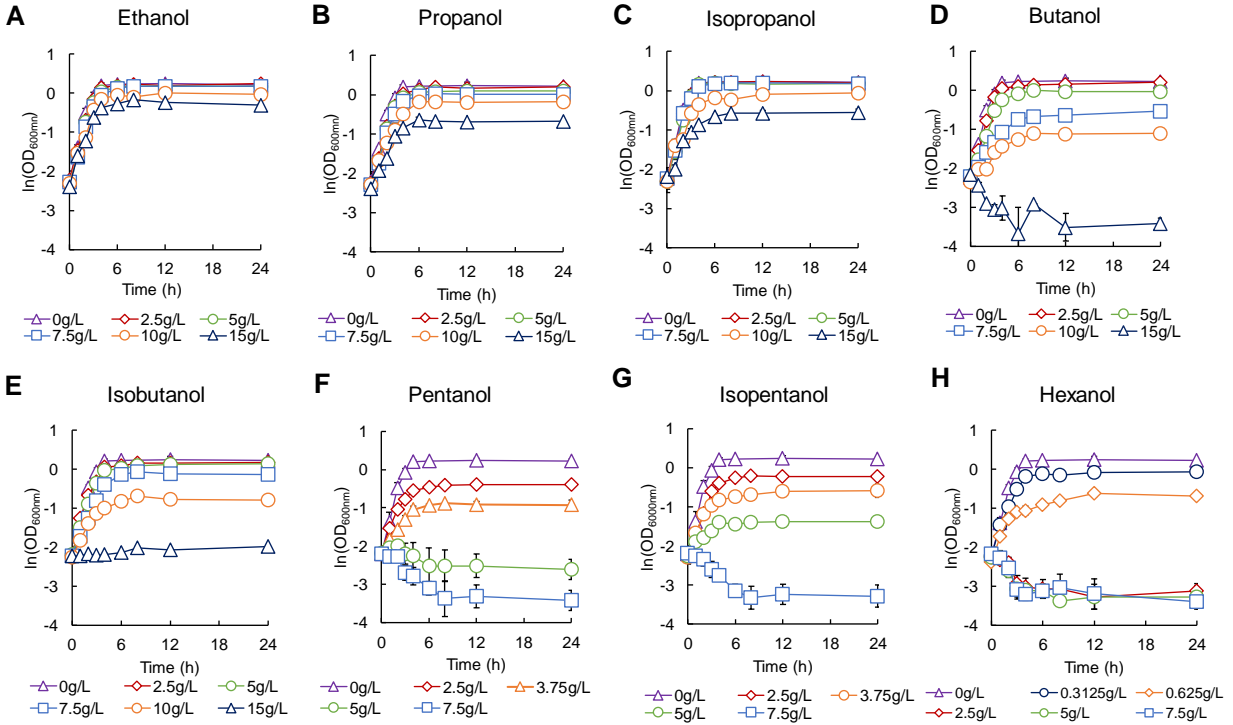


Figure S2: Growth kinetics of *E. coli* exposed to eight short-chain fatty acids at various concentrations including (A) acetic acid, (B) propanoic acid, (C) butanoic acid, (D) isobutanoic acid, (E) pentanoic acid, (F) isopentanoic acid, (G) hexanoic acid, and (H) octanoic acid

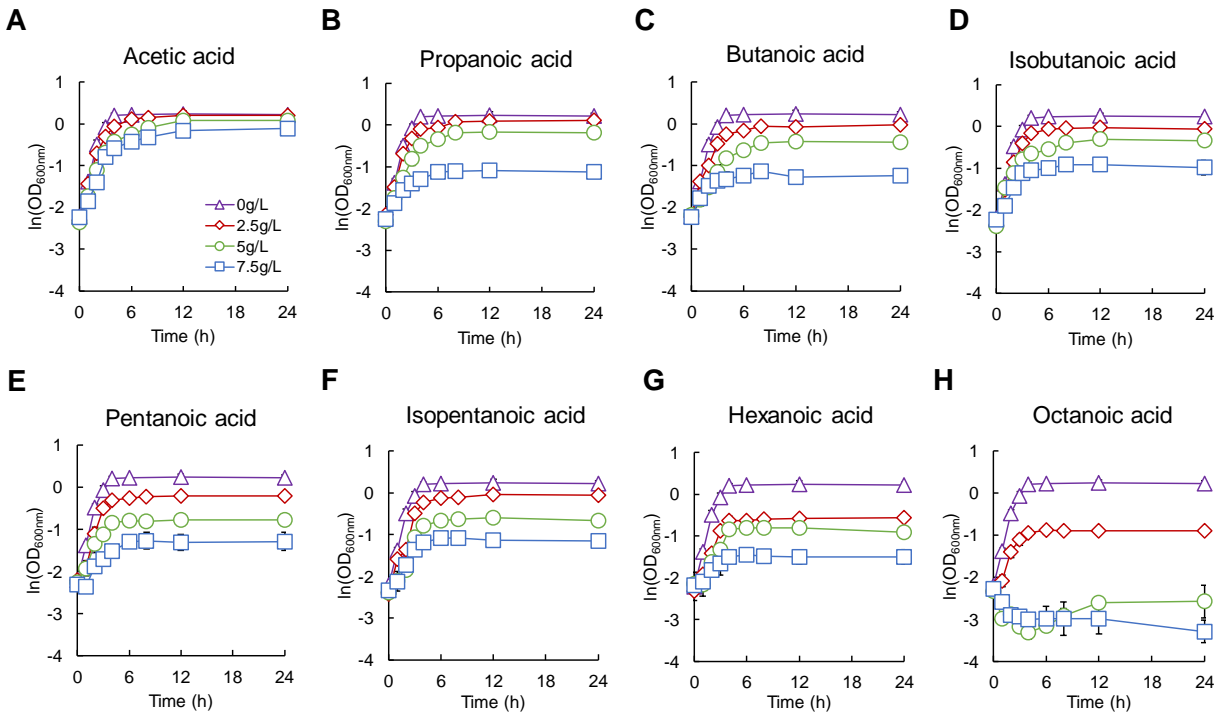


Figure S3: Growth kinetics of *E. coli* exposed to sixteen short-chain esters at various concentrations including (A-D) ethyl esters, (E-J) (iso)propyl esters, and (K-P) (iso)butyl esters

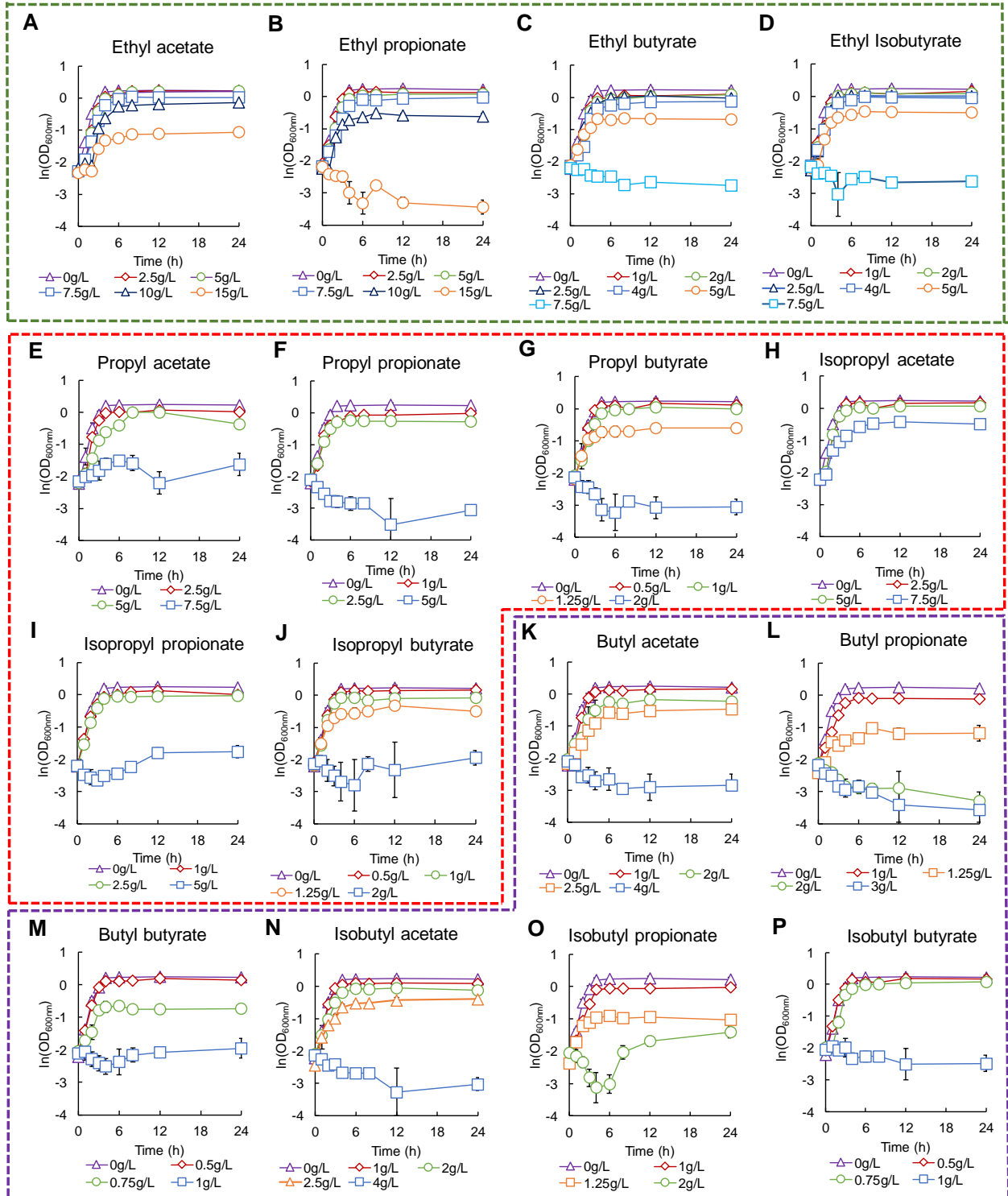


Figure S4: Correlation between growth rate and maximum OD of *E. coli* exposed to alcohols, acids, and esters at various concentrations

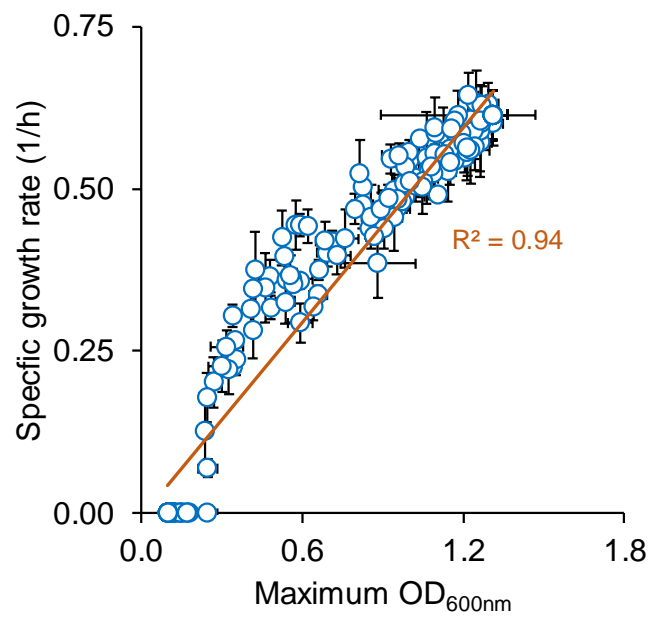


Figure S5: Effects of carbon numbers of alcohols on (A-C) specific growth rate and (D-F) maximum OD. Filled symbol: straight chain, open symbol: branched chain

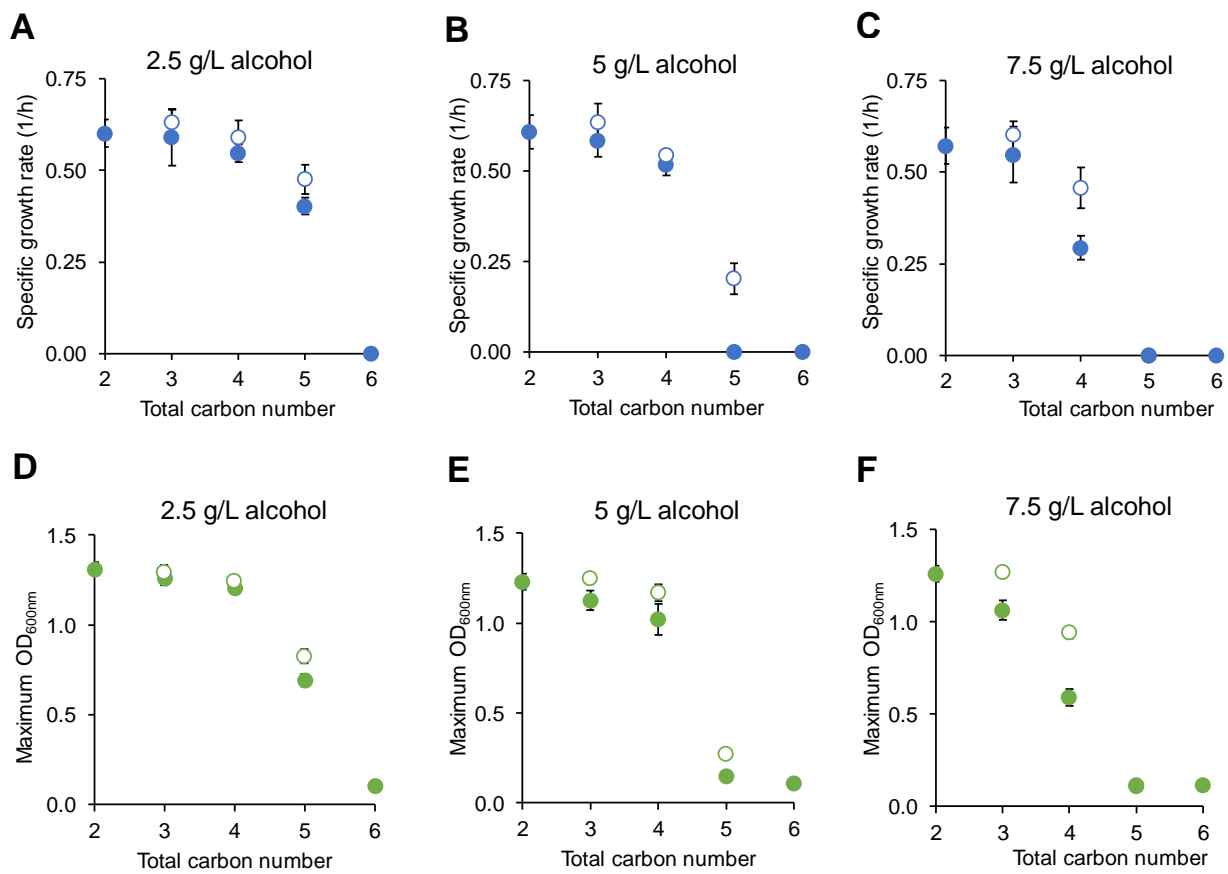


Figure S6: Effects of carbon numbers of acids on (A-C) specific growth rate and (D-F) maximum OD. Filled symbol: straight chain, open symbol: branched chain

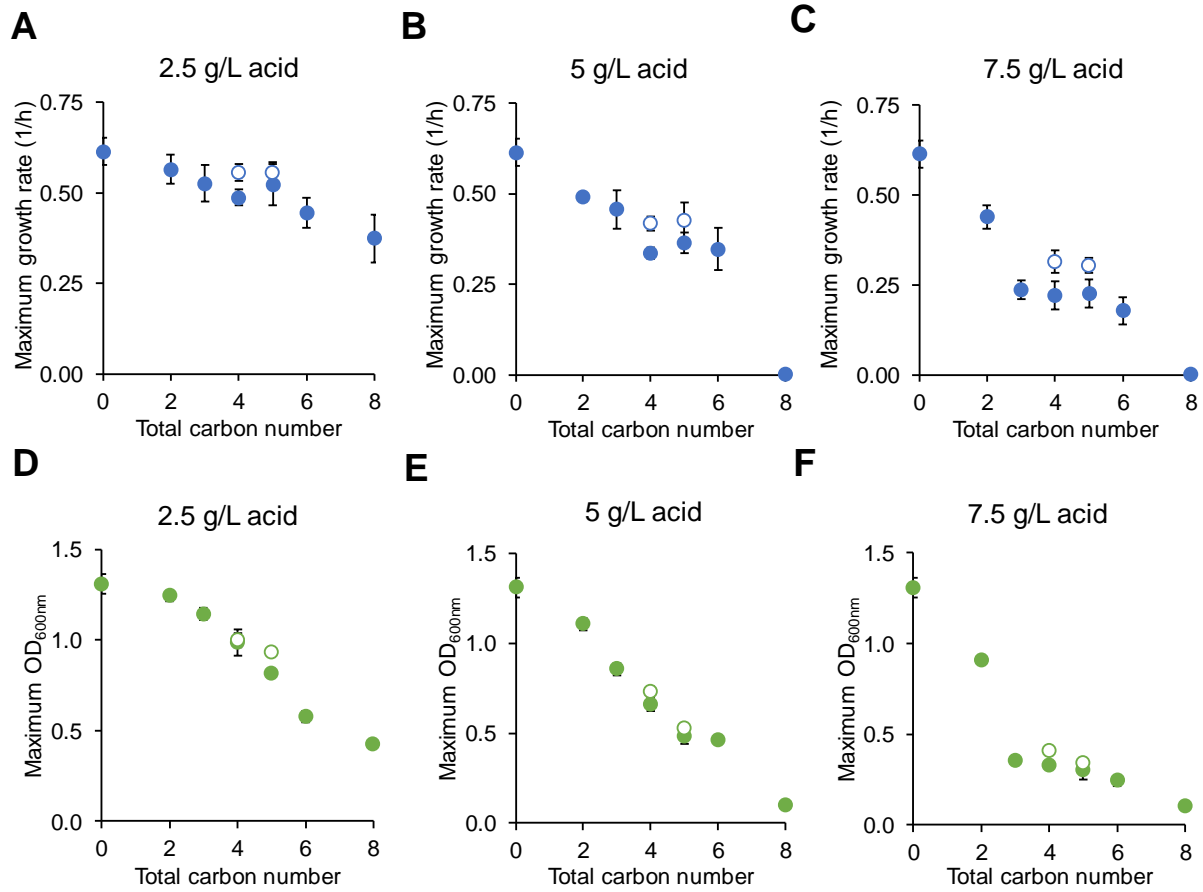


Figure S7: Effects of carbon numbers of alcohols on (A-C) specific growth rate and (D-F) maximum OD. Filled symbol: straight chain, open symbol: branched chain

