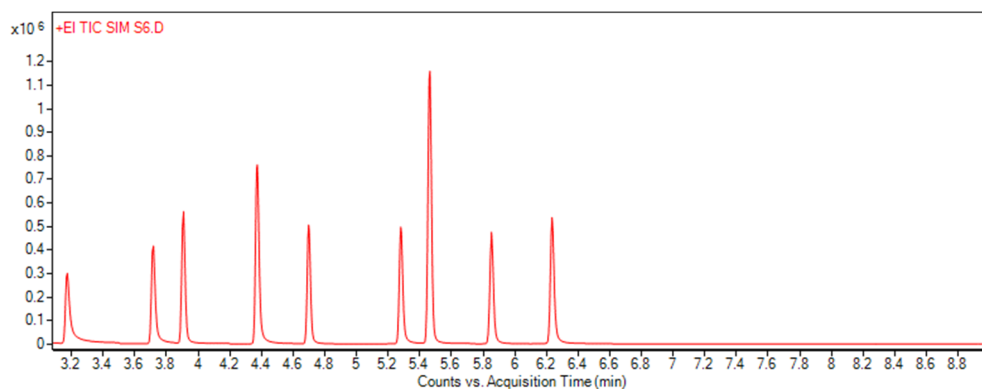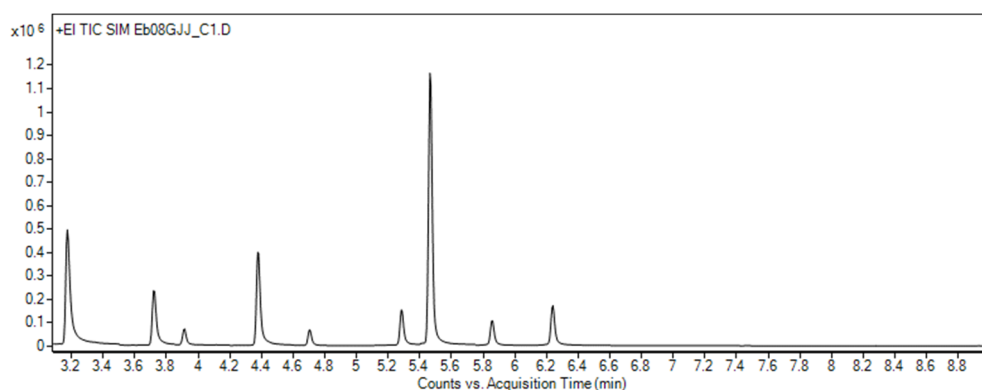# Supplemental Material of CW Manuscript

Table S1. Standard equations of eight SCFAs.

Name	Range （μg/mL）	Curve Equation	R^2	Limit of Quantitation
Acetic acid	0.2–400	$y = 0.251995 * x + 0.004574$	0.997	0.2
Propanoic acid	0.2–400	$y = 0.350989 * x - 0.002259$	0.998	0.2
Butanoic acid	0.2–400	$y = 1.049535 * x + 1.913722E\text{-}004$	0.998	0.2
Isobutyric acid	0.1–200	$y = 0.936800 * x + 7.791846E\text{-}005$	0.994	0.1
Valeric acid	0.1–200	$y = 1.272853 * x - 1.945562E\text{-}004$	0.997	0.1
Isovaleric acid	0.1–200	$y = 1.493061 * x + 1.308246E\text{-}004$	0.993	0.1
Hexanoic acid	0.1–200	$y = 0.665629 * x + 0.001153$	0.995	0.1
Isohexanoic acid	0.1–200	$y = 0.467166 * x + 1.814266E\text{-}004$	0.996	0.1

(**A**) standard solution

(**B**)Sample

Figure S1. the gas chromatographic diagram of the standard solution and sample.