

Supplementary Table S1 Linear regression equation of standard for volatile fatty acids.

Item	Retention time (min)	Linear equation	Correlation coefficient (r)
Acetic acid	4.59	$y = 0.0365x + 0.0562$	0.9929
Propionic acid	5.64	$y = 0.0617x + 0.0024$	0.9932
Butyric acid	6.02	$y = 0.1357x + 0.0021$	0.9975
Valeric acid	6.92	$y = 0.237x + 0.0175$	0.9980
Caproic acid	7.55	$y = 0.3179x - 0.0000004$	0.9946
Isobutyric acid	8.69	$y = 0.2194x - 0.0016$	0.9934
Isovaleric acid	10.17	$y = 0.7933x - 0.0013$	0.9927