Table S1. Quantitative parameters of organic acid standards.

NO.	Phase	standard curve	R^2	LOD (μg/L)	LOQ (μg/L)
1	Oxalic acid	Y=8243.89X+1752.21	0.9996	65.9	180.9
2	Tartaric acid	Y=8764.24X+1532.48	0.9997	371.8	987.7
3	Pyruvate	Y=866.413X+28643.2	0.9998	28.8	135.2
4	Malic acid	Y=446.944X-123.249	0.9998	160.8	490.6
5	Lactic acid	Y=11198.4X+1883.15	0.9996	660.7	1035.9
6	α-Ketoglutaric acids	Y=572.830X+213.137	0.9999	118.9	208.0
7	Acetic acid	Y=5267.33X+1423.98	0.9998	499.5	978.7
8	Citric acid	Y=374.413X+4357.85	0.9994	92.3	247.8
9	Succinic acid	Y=734.651X-395.621	0.9996	42.6	90.2
10	Fumaric acid	Y=13810.1X-420.123	0.9993	238.4	795.3

Note: LOD denotes limit of detection and LOQ denotes limit of quantification. Same as below.

Table S2. Quantitative parameters of amino acid standards.

NO.	Phase	standard curve	R^2	LOD (μg /L)	LOQ (μg /L)
1	Asp	Y=32361.8X+175102	0.9997	7.2	25.8
2	Glu	Y=14656.3X+116074	0.9991	8.0	27.7
3	Ser	Y=30068.6X+62734.4	0.9993	2.9	19.2
4	Gly	Y=14296.9X+81140.4	0.9994	8.2	30.8
5	Thr	Y=30429.0X+117049	0.9995	16.4	66.2
6	Trp	Y=19699.8X+98342.8	0.9997	18.1	76.4
7	Pro	Y=10424.0X+49689.8	0.9992	6.4	15.6
8	Arg	Y=19417.3X+213153	0.9997	9.6	32.4
9	Tyr	Y=18026.6X+35067.3	0.9992	5.2	20.2
10	Val	Y=15920.2X+72894.8	0.9998	9.4	25.8
11	Ala	Y=14624.8X+88543.5	0.9991	18.4	72.1
12	Met	Y=17658.2X+65424.4	0.9992	92.4	98.8
13	Cys	Y=58615.5X+27888.5	0.9999	4.8	17.4
14	Ile	Y=32371.4X+67092.2	0.9998	24.1	90.1
15	Leu	Y=27815.7X+105755	0.9996	11.2	50.1
16	Phe	Y=15365.6X+234274	0.9990	15.0	49.2
17	Lys	Y=17295.7X+302003	0.9991	8.8	20.7

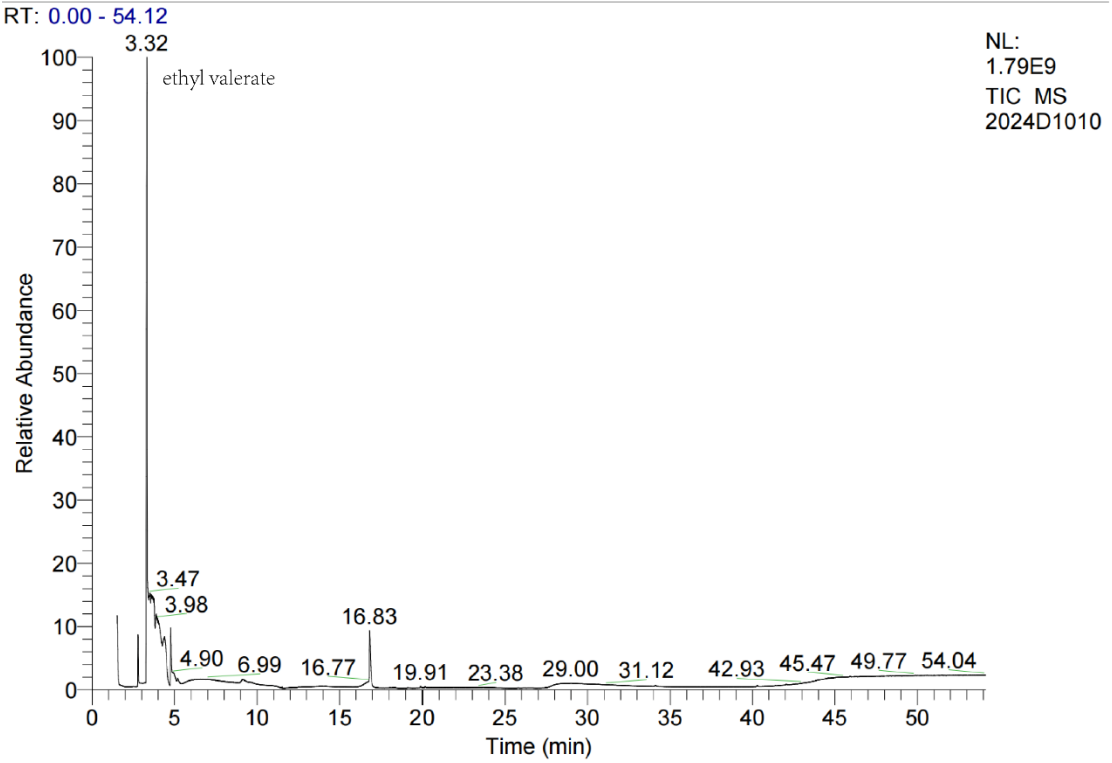


Figure S1. The internal standard of flavouring substances investigated in this work.