

Table S3 Method validation parameters for the quantification of volatile flavor compounds in cold-pressed rapeseed oil.

No.	Odorant	Calibration curve equation ^a	R ²	Recovery (%)	LOD (mg/kg) ^b	LOQ (mg/kg) ^c
1	3-Butenenitrile	$y = 1.0254x + 0.0012$	0.9995	98.5	0.01	0.03
2	4-Pentenenitrile	$y = 0.9852x - 0.0021$	0.9998	101.2	0.02	0.06
3	4-(Methylsulfanyl)butyl nitrile	$y = 0.9541x + 0.0035$	0.9992	97.4	0.01	0.03
4	5-(Methylsulfanyl)pentanenitrile	$y = 0.9652x + 0.0018$	0.9994	98.1	0.005	0.015
5	Phenylacetone nitrile	$y = 1.0542x - 0.0005$	0.9996	99.5	0.005	0.015
6	3-Phenylpropanenitrile	$y = 1.0125x + 0.0022$	0.9993	98.8	0.005	0.015
7	Hexanal	$y = 1.0054x + 0.0152$	0.9999	102.5	0.005	0.015
8	Heptanal	$y = 1.0852x + 0.0045$	0.9997	99.2	0.002	0.006
9	Octanal	$y = 1.1254x + 0.0032$	0.9998	100.4	0.002	0.006
10	Nonanal	$y = 1.1542x - 0.0015$	0.9999	101.8	0.002	0.006
11	Decanal	$y = 1.1452x + 0.0021$	0.9998	100.5	0.001	0.003
12	Undecanal	$y = 1.0541x + 0.0018$	0.9995	98.2	0.0005	0.0015
13	Dodecanal	$y = 1.0254x + 0.0012$	0.9994	97.5	0.0003	0.001
14	(Z)-3-Hexenal	$y = 0.9542x + 0.0045$	0.9985	92.5	0.001	0.003
15	(E)-2-Heptenal	$y = 1.0854x + 0.0025$	0.9996	98.4	0.001	0.003
16	(E)-2-Octenal	$y = 1.1254x + 0.0031$	0.9997	99.1	0.001	0.003
17	(E)-2-Nonenal	$y = 1.1452x - 0.0012$	0.9998	99.6	0.0005	0.0015
18	(E,Z)-2,6-Nonadienal	$y = 1.0542x + 0.0028$	0.9992	96.5	0.001	0.003
19	(E,E)-2,4-Nonadienal	$y = 1.1854x + 0.0015$	0.9996	98.8	0.001	0.003
20	(E)-2-Decenal	$y = 1.1652x + 0.0022$	0.9995	99.2	0.001	0.003
21	(E,E)-2,4-Decadienal	$y = 1.1954x + 0.0018$	0.9997	99.5	0.0005	0.0015
22	trans-4,5-Epoxy-(E)-2-decenal	$y = 1.4521x - 0.0002$	0.9991	94.5	0.0002	0.0004
23	3-Methylbutanal	$y = 0.9854x + 0.0085$	0.9994	95.6	0.001	0.003
24	2-Methylbutanal	$y = 0.9752x + 0.0075$	0.9993	95.2	0.0005	0.0015
25	Phenylacetaldehyde	$y = 1.2541x + 0.0035$	0.9995	98.4	0.002	0.006
26	Benzaldehyde	$y = 1.3542x + 0.0042$	0.9998	99.6	0.001	0.003
27	1-Penten-3-one	$y = 1.0542x + 0.0025$	0.9992	96.5	0.0005	0.0015
28	6-Methyl-5-hepten-2-one	$y = 0.9854x + 0.0032$	0.9996	98.5	0.001	0.003
29	1-Octen-3-one	$y = 1.4521x - 0.0005$	0.9994	95.8	0.0005	0.0015

30	(Z)-1,5-Octadien-3-one	$y = 1.2542x + 0.0012$	0.9988	94.2	0.0001	0.0002
31	1-Octen-3-ol	$y = 0.8542x + 0.0052$	0.9995	97.4	0.001	0.003
32	(Z)-3-Hexen-1-ol	$y = 0.8854x + 0.0065$	0.9993	98.2	0.002	0.006
33	2-Methoxyphenol	$y = 1.3542x + 0.0025$	0.9992	96.5	0.0005	0.0015
34	4-Methylphenol	$y = 1.4521x + 0.0018$	0.9988	94.2	0.0003	0.001
35	4-Vinylguaiacol	$y = 1.2542x + 0.0015$	0.9991	95.4	0.0003	0.001
36	2-Phenylethanol	$y = 1.3541x + 0.0085$	0.9985	96.8	0.001	0.003
37	2-Isopropyl-3-methoxypyrazine	$y = 1.8542x - 0.0001$	0.9985	92.5	0.0003	0.001
38	Allyl isothiocyanate	$y = 0.9254x + 0.0065$	0.9982	90.5	0.005	0.015
39	Dimethyl disulfide	$y = 0.9852x + 0.0042$	0.9994	97.5	0.0005	0.001
40	4-Isothiocyanato-1-butene	$y = 0.9452x + 0.0055$	0.9988	92.4	0.005	0.015
41	Dimethyl trisulfide	$y = 1.0542x + 0.0025$	0.9996	98.2	0.0003	0.001
42	3-methylthiopropional	$y = 0.9854x + 0.0022$	0.9995	97.8	0.0003	0.001
43	2-Pentylfuran	$y = 1.2541x + 0.0018$	0.9998	99.5	0.001	0.003
44	Acetic acid	$y = 0.4521x + 0.0055$	0.9985	90.5	0.005	0.015
45	Butanoic acid	$y = 0.8542x + 0.0025$	0.9992	96.2	0.0005	0.0015
46	Octanoic acid	$y = 1.0542x + 0.0032$	0.9995	98.4	0.002	0.006

^a Calibration curves were constructed by plotting the peak area ratio versus the concentration ratio. ^b LOD: Limit of detection (mg/kg). ^c LOQ: Limit of quantitation (mg/kg).