The relative content and distribution of absorbed volatile organic compounds in rats administered Asari Radix et Rhizoma are different between powder- and decoction-treated groups

Guang-Xue Liu[1], Feng Xu[1], Ming-Ying Shang[1,*], Xuan Wang[2] and Shao-Qing Cai[1,*]

Supplement materials

Figures

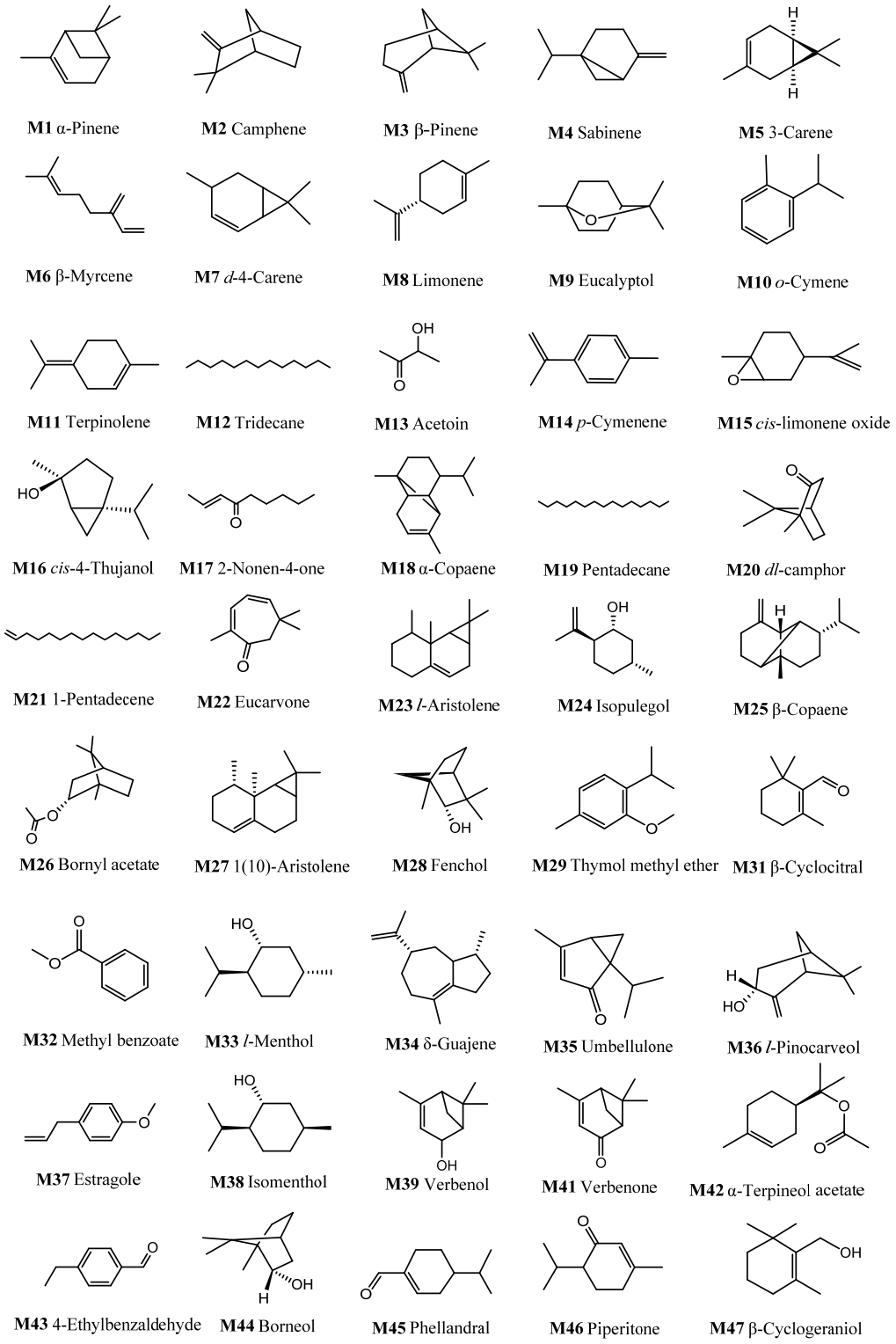

Figure S1-1. The volatile compounds identified *in vivo* in rats.

As some compounds can only be identified as isomers, the structures of them are not shown in the figure.

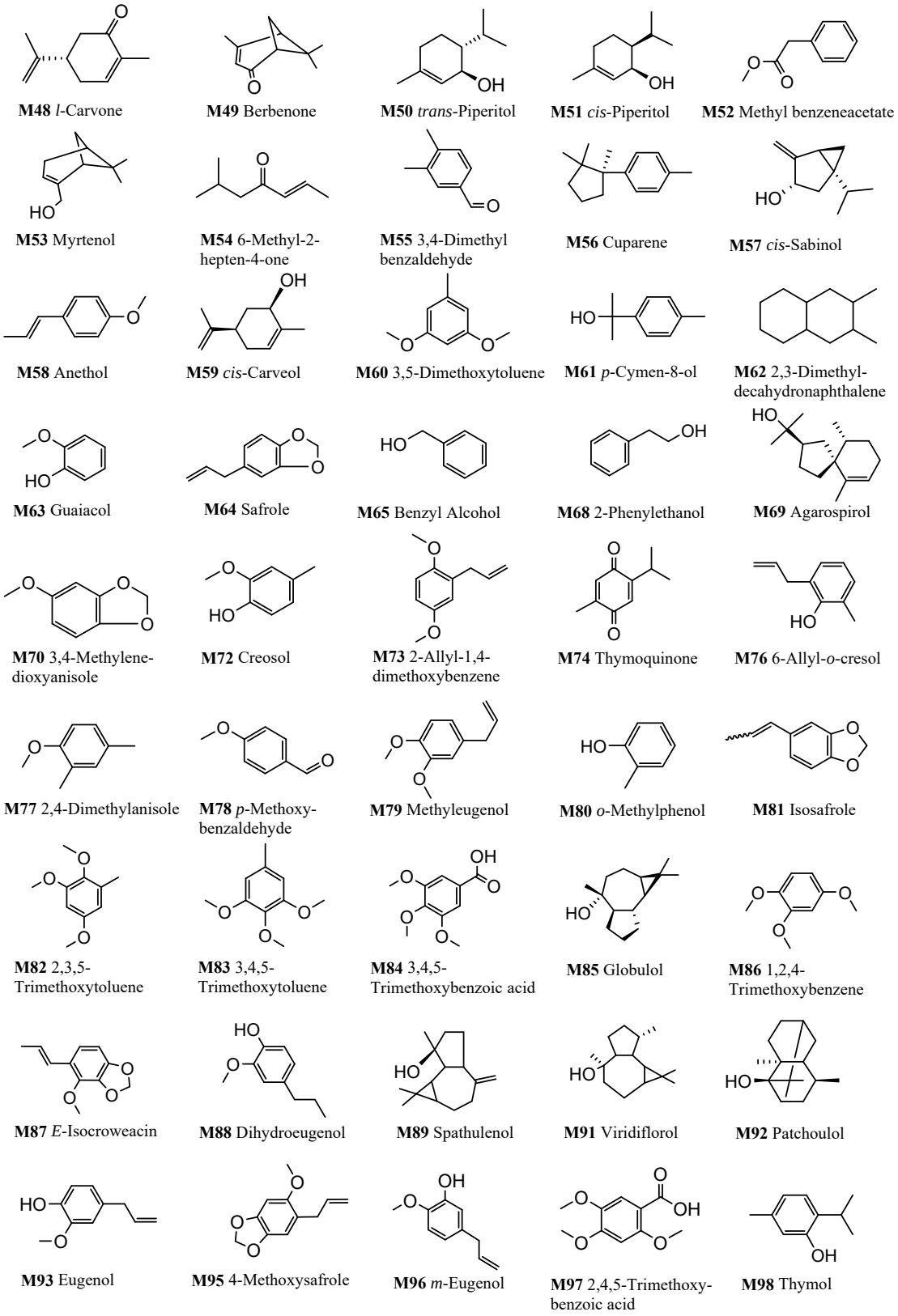

Figure S1-2. The volatile compounds identified *in vivo* in rats.

As some compounds can only be identified as isomers, the structures of them are not shown in the figure.

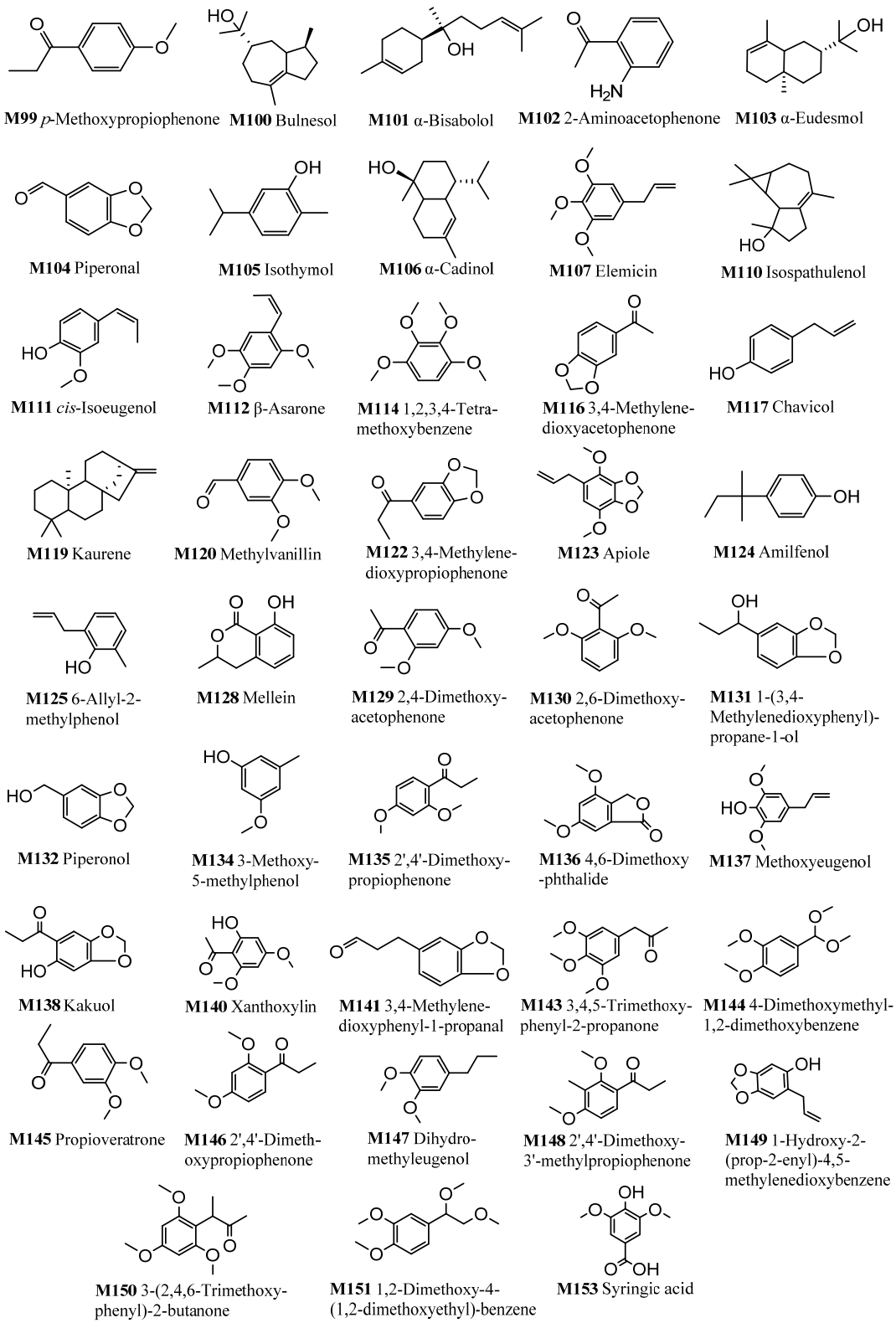

Figure S1-3. The volatile compounds identified *in vivo* in rats.

As some compounds could only be identified as isomers, the structures of them were not shown in the figure.

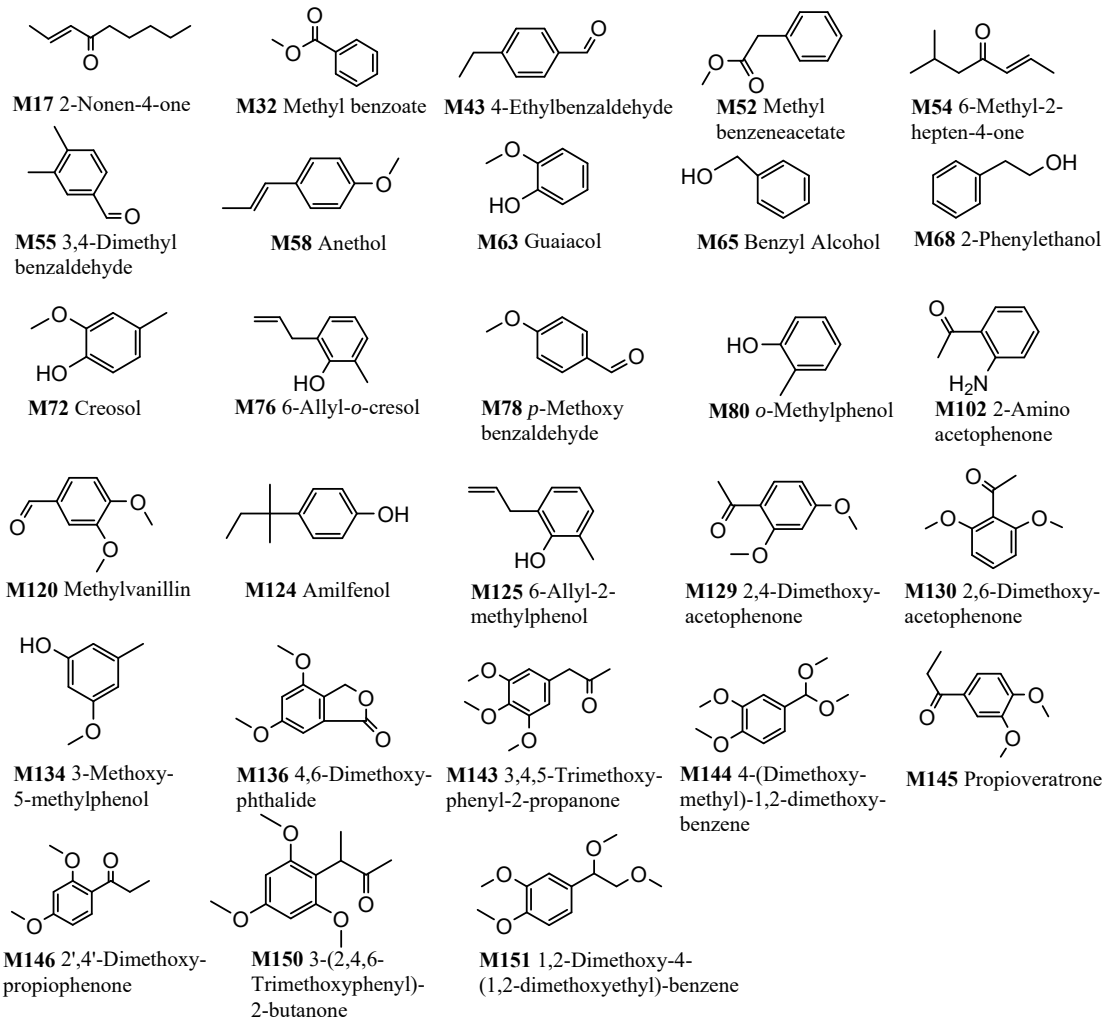

Figure S2. The unclassified compounds identified *in vivo* in rats.

Unclassified compounds were identified in the ARR treated groups, but could not be found in either the control group or the ARR sample itself, suggesting that they might be metabolites of constituents or endogenous substances generated after the administration of ARR. As some compounds could only be identified as isomers, the structures of them were not shown in the figure.

Tables

Table S1. Distribution of 37 unclassified compounds *in vivo* in rats after oral administration of ARR powder or decoction

No.	Unclassified Compounds	RI	Powder-treated group											Decoction-treated group										
			FE	UR	BL	BR	HE	LU	SP	LI	KI	ST	IN	FE	UR	BL	BR	HE	LU	SP	LI	KI	ST	IN
M17	2-Nonen-4-one	1477		●																				
M32	Methyl benzoate	1615													●									
M43	4-Ethylbenzaldehyde	1693				●	●														●			
M52	Methyl benzeneacetate	1758		●																				
M54	6-Methyl-2-hepten-4-one	1790	●																					
M55	3,4-Dimethylbenzaldehyde	1790													●									
M58	Anethol	1815	●																					
M63	Guaiacol	1860													●									
M65	Benzyl alcohol	1877													●									
M66	Verbenone isomer	1891																				●		
M68	2-Phenylethanol	1906													●									
M72	Creosol	1954													●									
M76	6-Allyl-*o*-cresol	2000													●									
M78	*p*-Methoxybenzaldehyde	2008		●																				
M80	*o*-Methylphenol	2012		●																				
M90	Dihydroeugenol isomer	2116		●											●									
M94	1,2,4-Trimethoxybenzene isomer	2181		●							●				●									
M102	2-Aminoacetophenone	2214												●										
M115	1,2,4-Trimethoxybenzene isomer	2334		●				●			●				●				●		●	●		●
M118	1,2,4-Trimethoxybenzene isomer	2355		●											●									
M120	Methylvanillin	2394		●																				
M121	Methoxyeugenol isomer	2398		●											●									
M124	Amilfenol	2418		●																				
M125	6-Allyl-2-methylphenol	2435		●																				
M129	2,4-Dimethoxyacetophenone	2483		●																				
M130	2,6-Dimethoxyacetophenone	2503													●									
M133	Methoxyeugenol isomer	2534		●																				
M134	3-Methoxy-5-methylphenol	2538		●											●									●

No.	Unclassified Compounds	RI	Powder-treated group											Decoction-treated group										
			FE	UR	BL	BR	HE	LU	SP	LI	KI	ST	IN	FE	UR	BL	BR	HE	LU	SP	LI	KI	ST	IN
M136	4,6-Dimethoxy-phthalide	2546																					●	
M142	2',4'-Dimethoxy-3'-methylpropiophenone isomer	2645																				●		
M143	3,4,5-Trimethoxyphenyl-2-propanone	2648		●											●									
M144	4-(Dimethoxymethyl)-1,2-dimethoxybenzene	2676										●											●	
M145	Propioveratrone	2686		●																			●	
M146	2',4'-Dimethoxypropiophenone	2687													●									
M150	3-(2,4,6-Trimethoxyphenyl)-2-butanone	2761		●																				
M151	1,2-Dimethoxy-4-(1,2-dimethoxyethyl)-benzene	2785										●											●	
M152	1-Hydroxy-2-(prop-2-enyl)-4,5-methylenedioxybenzene isomer	2814		●											●									
		Total:	2	19	0	1	1	1	0	0	2	2	0	1	17	0	0	0	1	0	2	3	4	2
			Total 24 unclassified compounds were identified in the powder group.											Total 25 unclassified compounds were identified in the decoction group.										

RI: calculating based on the C_7-C_{30} saturated alkanes; FE: feces; UR: urine; BL: blood; BR: Brain; HE: heart; LU: lung; SP: spleen; LI: liver; KI: kidney; ST: stomach; IN: small intestine; ●: detected.

Unclassified compounds were identified in the ARR treated groups, but could not be found in either the control group or the ARR sample itself.

Table S2. The information of 52 VOCs identified in the feces of rats in ARR powder-treated group by HS-SPME-GC-MS

No. [a]	Compounds	t_R (min)	MW	Formula	Ion [b]	Area	C (%) [c]	Identification [d]	RI [e]
M1	α-Pinene	3.785	136	$C_{10}H_{16}$	93	171932	0.49	MS, RI	1021
M2	Camphene	4.375	136	$C_{10}H_{16}$	93	32827	0.09	MS, RI	1060
M3	β-Pinene	4.955	136	$C_{10}H_{16}$	93	245739	0.70	MS, RI, REF	1099
M4	Sabinene	5.175	136	$C_{10}H_{16}$	93	31865	0.09	MS, RI	1110
M5	3-Carene	5.700	136	$C_{10}H_{16}$	93	66866	0.19	MS, RI	1135
M6	β-Myrcene	6.080	136	$C_{10}H_{16}$	93	23037	0.07	MS, RI	1154
M8	Limonene	6.830	136	$C_{10}H_{16}$	93	22517	0.06	MS, RI, REF	1191
M9	Eucalyptol	7.095	154	$C_{10}H_{18}O$	81	62464	0.18	MS, RI	1204
M10	*o*-Cymene	8.630	134	$C_{10}H_{14}$	119	70263	0.20	MS, RI	1267
M11	Terpinolene	8.895	136	$C_{10}H_{16}$	93	8324	0.02	MS, RI	1279
M16	*cis*-4-Thujanol	13.795	154	$C_{10}H_{18}O$	111	4598	0.01	MS, RI	1462
M18	α-Copaene	14.485	204	$C_{15}H_{24}$	161	16753	0.05	MS, RI	1485
M20	*dl*-Camphor	15.305	152	$C_{10}H_{16}O$	95	87854	0.25	MS, RI	1507
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	141683	0.40	MS, REF	1543
M23	*l*-Aristolene	17.560	204	$C_{15}H_{24}$	105	28432	0.08	MS, RI	1553
M24	Isopulegol	17.720	154	$C_{10}H_{18}O$	139	3377	0.01	MS, RI	1556
M25	β-Copaene	18.115	204	$C_{15}H_{24}$	161	12845	0.04	MS, RI	1565
M26	Bornyl acetate	18.305	196	$C_{12}H_{20}O_2$	95	33587	0.10	MS, RI	1568
M27	1(10)-Aristolene	18.760	204	$C_{15}H_{24}$	161	190475	0.54	MS, RI	1577
M34	δ-Guaiene	21.535	204	$C_{15}H_{24}$	93	52101	0.15	MS, RI	1626
M44	Borneol	25.875	154	$C_{10}H_{18}O$	95	4673426	13.32	MS, RI	1694
M54	6-Methyl-2-hepten-4-one	32.060	126	$C_8H_{14}O$	111	24937	0.07	MS	1790
M58	Anethol	33.265	148	$C_{10}H_{12}O$	148	56098	0.16	MS, RI	1815
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	7192478	20.51	MS, RI, REF	1841
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	3252027	9.27	MS, RI, REF	1863
M69	Agarospirol	37.365	222	$C_{15}H_{26}O$	207	33421	0.10	MS	1928
M71	Isosafrole isomer	37.575	162	$C_{10}H_{10}O_2$	162	52447	0.15	MS	1936
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	2044322	5.83	MS, RI, REF	2011
M81	Isosafrole	39.925	162	$C_{10}H_{10}O_2$	162	2345048	6.69	MS, RI	2020
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	3452503	9.84	REF	2040
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	4069981	11.60	MS, RI, REF	2048
M84	3,4,5-Trimethoxybenzoic acid	40.780	212	$C_{10}H_{12}O_5$	212	40435	0.12	MS	2056
M85	Globulol	40.910	222	$C_{15}H_{26}O$	95	21896	0.06	MS, RI	2061
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	541442	1.54	MS	2096
M89	Spathulenol	42.110	220	$C_{15}H_{24}O$	205	17215	0.05	MS, RI	2112
M93	Eugenol	43.250	164	$C_{10}H_{12}O_2$	164	101999	0.29	MS, RI, REF	2166
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	2347538	6.69	MS, RI	2189
M98	Thymol	43.850	150	$C_{10}H_{14}O$	135	594176	1.69	MS, RI	2194
M100	Bulnesol	44.010	222	$C_{15}H_{26}O$	161	20620	0.06	MS, RI	2202
M103	α-Eudesmol	44.325	222	$C_{15}H_{26}O$	149	26197	0.07	MS, RI	2219
M106	α-Cadinol	44.435	222	$C_{15}H_{26}O$	121	37560	0.11	MS, RI	2225
M113	1,2,4-Trimethoxybenzene isomer	45.360	168	$C_9H_{12}O_3$	168	556981	1.59	MS	2273
M114	1,2,3,4-Tetramethoxybenzene	45.590	198	$C_{10}H_{14}O_4$	198	123993	0.35	MS, RI	2286
M119	Kaurene	46.785	272	$C_{20}H_{32}$	257	14646	0.04	MS, RI	2362
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	400045	1.14	MS, REF	2405
M126	Methoxyeugenol isomer	47.835	194	$C_{11}H_{14}O_3$	194	15324	0.04	MS	2441
M127	Kakuol isomer	47.895	194	$C_{10}H_{10}O_4$	165	116814	0.33	MS	2447
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.770	180	$C_{10}H_{12}O_3$	151	13032	0.04	MS	2520
M135	2',4'-Dimethoxypropiophenone	49.045	194	$C_{11}H_{14}O_3$	165	22552	0.06	MS	2544
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	1360464	3.88	MS, REF	2567
M140	Xanthoxylin	49.760	196	$C_{10}H_{10}O_4$	181	42216	0.12	MS	2608
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	155025	0.44	MS	2734

[a] Compounds identified in feces, urine, blood, and eight organ samples (brain, heart, lung, spleen, liver, kidney, stomach, and small intestine) are sorted by retention time (t_R), and their polarity increases with prolonged retention time. [b] Ion and [c] C (%): Contents were calculated from extracted ion chromatography (EIC) according to area generalization method. [d] Identification: MS: searching mass spectra in NIST 11(version 2011, National Institute of Standards and Technology, USA) library embedded in GC-MS workstation (GCMS solutions, version 2.71, Shimadzu, Kyoto, Japan); RI: comparing retention index (RI) and mass spectra with literature; REF: comparing retention time and mass spectra with reference compounds. [e] RI: calculating based on the C_7–C_{30} saturated alkanes.
The note of Table S2 is also suitable for Tables S3–S23 in the supplement material.

Table S3. The information of 68 VOCs identified in the urine of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M15	*cis*-Limonene oxide	13.135	152	$C_{10}H_{16}O$	137	4428	0.01	MS, RI	1441
M17	2-Nonen-4-one	14.270	140	$C_9H_{16}O$	69	57292	0.12	MS, RI	1477
M20	*dl*-Camphor	15.340	152	$C_{10}H_{16}O$	95	128740	0.27	MS, RI	1508
M22	Eucarvone	17.095	150	$C_{10}H_{14}O$	107	821759	1.75	MS, REF	1544
M24	Isopulegol	17.710	154	$C_{10}H_{18}O$	139	3632	0.01	MS, RI	1556
M28	Fenchol	18.920	154	$C_{10}H_{18}O$	81	18757	0.04	MS, RI	1581
M31	β-Cyclocitral	20.510	152	$C_{10}H_{16}O$	137	12398	0.03	MS, RI	1610
M33	*l*-Menthol	21.220	156	$C_{10}H_{20}O$	95	10123	0.02	MS, RI	1621
M35	Umbellulone	21.815	150	$C_{10}H_{14}O$	108	22890	0.05	MS, RI	1630
M36	*l*-Pinocarveol	23.120	152	$C_{10}H_{16}O$	92	33448	0.07	MS, RI	1651
M38	Isomenthol	24.295	156	$C_{10}H_{20}O$	59	10354	0.02	MS, RI	1670
M40	Eucarvone isomer	24.990	150	$C_{10}H_{14}O$	107	65723	0.14	MS	1680
M44	Borneol	25.895	154	$C_{10}H_{18}O$	95	4981465	10.58	MS, RI	1695
M45	Phellandral	26.415	154	$C_{10}H_{18}O$	109	34705	0.07	MS, RI	1703
M46	Piperitone	26.610	152	$C_{10}H_{16}O$	82	22856	0.05	MS, RI	1706
M47	β-Cyclogeraniol	26.960	154	$C_{10}H_{18}O$	93	5992	0.01	MS	1711
M48	*l*-Carvone	27.270	150	$C_{10}H_{14}O$	82	60143	0.13	MS, RI	1716
M49	Berbenone	28.190	150	$C_{10}H_{14}O$	150	34403	0.07	MS, RI	1730
M50	*trans*-Piperitol	29.165	154	$C_{10}H_{18}O$	84	10429	0.02	MS, RI	1745
M51	*cis*-Piperitol	29.485	154	$C_{10}H_{18}O$	84	28096	0.06	MS, RI	1750
M52	Methyl benzeneacetate	29.955	150	$C_9H_{10}O_2$	91	28669	0.06	MS, RI	1758
M53	Myrtenol	31.910	152	$C_{10}H_{16}O$	108	5924	0.01	MS, RI	1788
M57	*cis*-Sabinol	32.645	152	$C_{10}H_{16}O$	92	70666	0.15	MS, RI	1799
M59	*cis*-Carveol	34.050	152	$C_{10}H_{16}O$	109	22829	0.05	MS, RI	1835
M60	3,5-Dimethoxytoluene	34.265	152	$C_9H_{12}O_2$	152	544677	1.16	MS, RI, REF	1841
M61	*p*-Cymen-8-ol	34.660	150	$C_{10}H_{14}O$	135	261325	0.55	MS, RI	1851
M64	Safrole	35.130	162	$C_{10}H_{10}O_2$	162	44345	0.09	MS, RI, REF	1863
M78	*p*-Methoxybenzaldehyde	39.630	136	$C_8H_8O_2$	135	35202	0.07	MS, RI	2008
M79	Methyleugenol	39.710	178	$C_{11}H_{14}O_2$	178	124210	0.26	MS, RI, REF	2011
M80	*o*-Methylphenol	39.730	108	C_7H_8O	108	173080	0.37	MS, RI	2012
M81	Isosafrole	39.925	162	$C_{10}H_{10}O_2$	162	8693	0.02	MS, RI	2020
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	653061	1.39	REF	2040
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	1098531	2.33	MS, RI, REF	2048
M88	Dihydroeugenol	41.970	166	$C_{10}H_{14}O_2$	137	4465141	9.48	MS, RI	2106
M90	Dihydroeugenol isomer	42.190	166	$C_{10}H_{14}O_2$	137	344271	0.73	MS	2116
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	5663865	12.03	MS, RI, REF	2166
M94	1,2,4-Trimethoxybenzene isomer	43.565	168	$C_9H_{12}O_3$	153	1270131	2.70	MS	2181
M96	*m*-Eugenol	43.780	164	$C_{10}H_{12}O_2$	164	266429	0.57	MS, RI	2191
M98	Thymol	43.850	150	$C_{10}H_{14}O$	135	302999	0.64	MS, RI	2194
M104	Piperonal	44.340	150	$C_8H_6O_3$	149	798155	1.70	MS, RI	2219
M109	Methoxyeugenol isomer	44.870	194	$C_{11}H_{14}O_3$	194	28455	0.06	MS	2248
M111	*cis*-Isoeugenol	45.080	164	$C_{10}H_{12}O_2$	164	43456	0.09	MS, RI	2258
M113	1,2,4-Trimethoxybenzene isomer	45.325	168	$C_9H_{12}O_3$	168	487523	1.04	MS	2273
M114	1,2,3,4-Tetramethoxybenzene	45.595	198	$C_{10}H_{14}O_4$	198	44397	0.09	MS, RI	2286
M115	1,2,4-Trimethoxybenzene isomer	46.360	168	$C_9H_{12}O_3$	153	258162	0.55	MS	2334
M116	3,4-Methylenedioxyacetophenone	46.400	164	$C_9H_8O_3$	149	241710	0.51	MS	2337
M117	Chavicol	46.605	134	$C_9H_{10}O$	134	510964	1.09	MS, RI	2350
M118	1,2,4-Trimethoxybenzene isomer	46.670	168	$C_9H_{12}O_3$	168	161265	0.34	MS	2355
M120	Methylvanillin	47.240	166	$C_9H_{10}O_3$	166	54498	0.12	MS, RI	2394
M122	3,4-Methylenedioxypropiophenone	47.400	178	$C_{10}H_{10}O_3$	149	456447	0.97	MS, REF	2405
M124	Amilfenol	47.560	164	$C_{11}H_{16}O$	135	6738	0.01	MS	2418
M125	6-Allyl-2-methylphenol	47.755	148	$C_{10}H_{12}O$	148	10119	0.02	MS	2435
M126	Methoxyeugenol isomer	47.830	194	$C_{11}H_{14}O_3$	194	287677	0.61	MS	2441
M127	Kakuol isomer	47.900	194	$C_{10}H_{10}O_4$	165	3467158	7.36	MS	2447
M128	Mellein	48.255	178	$C_{10}H_{10}O_3$	178	36932	0.08	MS, RI	2475
M129	2,4-Dimethoxyacetophenone	48.345	180	$C_{10}H_{12}O_3$	165	50946	0.11	MS	2483
M133	Methoxyeugenol isomer	48.935	194	$C_{11}H_{14}O_3$	194	73982	0.16	MS	2534
M134	3-Methoxy-5-methylphenol	48.985	138	$C_8H_{10}O_2$	138	573184	1.22	MS, RI	2538
M135	2',4'-Dimethoxypropiophenone	49.050	194	$C_{11}H_{14}O_3$	165	79181	0.17	MS	2544
M138	Kakuol	49.305	194	$C_{10}H_{10}O_4$	165	16790389	35.66	MS, REF	2568
M140	Xanthoxylin	49.755	196	$C_{10}H_{10}O_4$	181	482144	1.02	MS	2608
M141	3,4-Methylenedioxyphenyl-1-propanal	49.915	178	$C_{10}H_{10}O_3$	178	72502	0.15	MS	2620
M143	3,4,5-Trimethoxyphenyl-2-propanone	50.270	224	$C_{12}H_{16}O_4$	181	106370	0.23	MS	2648
M145	Propioveratrone	50.740	194	$C_{11}H_{14}O_3$	165	65475	0.14	MS	2686

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M149	1-Hydroxy-2-(prop-2-enyl)-4,5-methylenedioxybenzene	51.670	178	$C_{10}H_{10}O_3$	135	40318	0.09	MS	2750
M150	3-(2,4,6-Trimethoxyphenyl)-2-butanone	51.850	238	$C_{13}H_{18}O_4$	149	47506	0.10	MS	2761
M152	1-Hydroxy-2-(prop-2-enyl)-4,5-methylenedioxybenzene isomer	52.665	178	$C_{10}H_{10}O_3$	178	34823	0.07	MS	2814
M153	Syringic acid	55.055	198	$C_9H_{10}O_5$	198	26757	0.06	MS	2934

The note of Table S2 is also suitable for Table S3.

Table S4. The information of 24 VOCs identified in the blood of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M20	*dl*-Camphor	15.305	152	$C_{10}H_{16}O$	95	11894	0.11	MS, RI	1508
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	69543	0.65	MS, REF	1543
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	30309	0.28	MS, RI, REF	1664
M44	Borneol	25.875	154	$C_{10}H_{18}O$	95	13032	0.12	MS, RI	1695
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	2675747	25.02	MS, RI, REF	1841
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	2539402	23.74	MS, RI, REF	1863
M74	Thymoquinone	38.880	164	$C_{10}H_{12}O_2$	149	3089	0.03	MS, RI	1980
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	501888	4.69	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	1913228	17.89	REF	2040
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	2107637	19.71	MS, RI, REF	2048
M84	3,4,5-Trimethoxybenzoic acid	40.780	212	$C_{10}H_{12}O_5$	212	13334	0.12	MS	2056
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	172532	1.61	MS	2097
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	234811	2.20	MS, RI	2189
M97	2,4,5-Trimethoxybenzoic acid	43.815	212	$C_{10}H_{12}O_5$	212	14710	0.14	MS	2192
M99	*p*-Methoxypropiophenone	43.910	164	$C_{10}H_{12}O_2$	135	17908	0.17	MS	2197
M104	Piperonal	44.340	150	$C_8H_6O_3$	149	7544	0.07	MS, RI	2219
M107	Elemicin	44.505	208	$C_{12}H_{16}O_3$	208	19365	0.18	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.765	182	$C_{10}H_{14}O_3$	182	10326	0.10	MS	2242
M112	β-Asarone	45.180	208	$C_{12}H_{16}O_3$	208	4593	0.04	MS, RI, REF	2264
M116	3,4-Methylenedioxyacetophenone	46.400	164	$C_9H_8O_3$	149	14711	0.14	MS	2337
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	169092	1.58	MS, REF	2405
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.770	180	$C_{10}H_{12}O_3$	151	15574	0.15	MS	2520
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	98931	0.92	MS, REF	2567
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	36560	0.34	MS	2734

The note of Table S2 is also suitable for Table S4.

Table S5. The information of 16 VOCs identified in the brain of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M22	Eucarvone	17.095	150	$C_{10}H_{14}O$	107	25300	0.36	MS, REF	1544
M37	Estragole	23.970	148	$C_{10}H_{12}O$	148	32455	0.47	MS, RI, REF	1664
M43	4-Ethylbenzaldehyde	25.830	134	$C_9H_{10}O$	134	169319	2.44	MS, RI	1693
M60	3,5-Dimethoxytoluene	34.280	152	$C_9H_{12}O_2$	152	2476313	35.66	MS, RI, REF	1841
M64	Safrole	35.140	162	$C_{10}H_{10}O_2$	162	1936097	27.88	MS, RI, REF	1863
M79	Methyleugenol	39.720	178	$C_{11}H_{14}O_2$	178	398322	5.74	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.420	182	$C_{10}H_{14}O_3$	167	750919	10.81	REF	2041
M83	3,4,5-Trimethoxytoluene	40.615	182	$C_{10}H_{14}O_3$	182	641840	9.24	MS, RI, REF	2049
M87	*E*-Isocroweacin	41.760	192	$C_{11}H_{12}O_3$	192	88522	1.27	MS	2096
M95	4-Methoxysafrole	43.755	192	$C_{11}H_{12}O_3$	192	214327	3.09	MS, RI	2190
M99	*p*-Methoxypropiophenone	43.915	164	$C_{10}H_{12}O_2$	135	10483	0.15	MS	2197
M107	Elemicin	44.500	208	$C_{12}H_{16}O_3$	208	11114	0.16	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.770	182	$C_{10}H_{14}O_3$	182	3793	0.05	MS	2242
M122	3,4-Methylenedioxypropiophenone	47.400	178	$C_{10}H_{10}O_3$	149	100124	1.44	MS, REF	2406
M138	Kakuol	49.300	194	$C_{10}H_{10}O_4$	165	67174	0.97	MS, REF	2567
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.455	208	$C_{12}H_{16}O_3$	179	18747	0.27	MS	2736

The note of Table S2 is also suitable for Table S5.

Table S6. The information of 15 VOCs identified in the heart of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M20	*dl*-Camphor	15.305	152	$C_{10}H_{16}O$	95	5247	0.13	MS, RI	1508
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	17260	0.42	MS, REF	1544
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	14670	0.35	MS, RI, REF	1665
M43	4-Ethylbenzaldehyde	25.830	134	$C_9H_{10}O$	134	37670	0.91	MS, RI	1694
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	1447286	34.93	MS, RI, REF	1841
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	981957	23.70	MS, RI, REF	1863
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	263514	6.36	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	544941	13.15	REF	2040
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	460060	11.10	MS, RI, REF	2049
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	51956	1.25	MS	2096
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	139456	3.37	MS, RI	2189
M107	Elemicin	44.505	208	$C_{12}H_{16}O_3$	208	9808	0.24	MS, RI, REF	2228
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	92509	2.23	MS, REF	2406
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	60200	1.45	MS, REF	2567
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	17005	0.41	MS	2735

The note of Table S2 is also suitable for Table S6.

Table S7. The information of 15 VOCs identified in the lung of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M20	*dl*-Camphor	15.290	152	$C_{10}H_{16}O$	95	4213	0.12	MS, RI	1507
M22	Eucarvone	17.055	150	$C_{10}H_{14}O$	107	11913	0.33	MS, REF	1543
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	18888	0.53	MS, RI, REF	1663
M60	3,5-Dimethoxytoluene	34.255	152	$C_9H_{12}O_2$	152	1267567	35.43	MS, RI, REF	1840
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	979939	27.39	MS, RI, REF	1863
M79	Methyleugenol	39.720	178	$C_{11}H_{14}O_2$	178	242963	6.79	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	389394	10.89	REF	2040
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	327900	9.17	MS, RI, REF	2048
M87	*E*-Isocroweacin	41.745	192	$C_{11}H_{12}O_3$	192	31167	0.87	MS	2096
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	53666	1.50	MS, RI, REF	2166
M99	*p*-Methoxypropiophenone	43.920	164	$C_{10}H_{12}O_2$	135	10120	0.28	MS	2197
M115	1,2,4-Trimethoxybenzene isomer	46.360	168	$C_9H_{12}O_3$	153	6382	0.18	MS	2334
M122	3,4-Methylenedioxypropiophenone	47.400	178	$C_{10}H_{10}O_3$	149	123130	3.44	MS, REF	2406
M138	Kakuol	49.300	194	$C_{10}H_{10}O_4$	165	85328	2.39	MS, REF	2567
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.445	208	$C_{12}H_{16}O_3$	179	24654	0.69	MS	2735

The note of Table S2 is also suitable for Table S7.

Table S8. The information of 17 VOCs identified in the spleen of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	46777	0.71	MS, REF	1543
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	20289	0.31	MS, RI, REF	1664
M44	Borneol	25.875	154	$C_{10}H_{18}O$	95	34582	0.52	MS, RI	1694
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	1862216	28.13	MS, RI, REF	1840
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	1427886	21.57	MS, RI, REF	1863
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	902632	13.63	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	972738	14.69	REF	2040
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	588416	8.89	MS, RI, REF	2048
M84	3,4,5-Trimethoxybenzoic acid	40.780	212	$C_{10}H_{12}O_5$	212	6023	0.09	MS	2056
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	115040	1.74	MS	2096
M93	Eugenol	43.250	164	$C_{10}H_{12}O_2$	164	21769	0.33	MS, RI, REF	2166
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	281324	4.25	MS, RI	2189
M99	*p*-Methoxypropiophenone	43.910	164	$C_{10}H_{12}O_2$	135	14283	0.22	MS	2197
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	115466	1.74	MS, REF	2405
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.770	180	$C_{10}H_{12}O_3$	151	7836	0.12	MS	2521
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	162096	2.45	MS, REF	2567
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	40977	0.62	MS	2734

The note of Table S2 is also suitable for Table S8.

Table S9. The information of 28 VOCs identified in the liver of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M9	Eucalyptol	7.095	154	$C_{10}H_{18}O$	81	5195	0.03	MS, RI	1203
M20	*dl*-Camphor	15.305	152	$C_{10}H_{16}O$	95	58391	0.29	MS, RI	1507
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	566692	2.83	MS, REF	1543
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	98101	0.49	MS, RI, REF	1664
M40	Eucarvone isomer	24.990	150	$C_{10}H_{14}O$	107	14115	0.07	MS	1680
M46	Piperitone	26.610	152	$C_{10}H_{16}O$	82	12951	0.06	MS, RI	1706
M49	Berbenone	28.190	150	$C_{10}H_{14}O$	150	21376	0.11	MS, RI	1731
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	7085640	35.35	MS, RI, REF	1841
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	5028955	25.09	MS, RI, REF	1863
M70	3,4-Methylenedioxyanisole	37.450	152	$C_8H_8O_3$	152	3781	0.02	MS	1931
M77	2,4-Dimethylanisole	39.485	136	$C_9H_{12}O$	121	3128	0.02	MS	2002
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	1288382	6.43	MS, RI, REF	2011
M81	Isosafrole	39.925	162	$C_{10}H_{10}O_2$	162	9390	0.05	MS, RI	2020
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	2262002	11.28	REF	2040
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	1894040	9.45	MS, RI, REF	2048
M84	3,4,5-Trimethoxybenzoic acid	40.780	212	$C_{10}H_{12}O_5$	212	9546	0.05	MS	2056
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	261667	1.31	MS	2096
M88	Dihydroeugenol	41.970	166	$C_{10}H_{14}O_2$	137	13873	0.07	MS, RI	2106
M93	Eugenol	43.250	164	$C_{10}H_{12}O_2$	164	47780	0.24	MS, RI, REF	2166
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	762872	3.81	MS, RI	2189
M97	2,4,5-Trimethoxybenzoic acid	43.815	212	$C_{10}H_{12}O_5$	212	12635	0.06	MS	2193
M107	Elemicin	44.505	208	$C_{12}H_{16}O_3$	208	37358	0.19	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.765	182	$C_{10}H_{14}O_3$	182	9830	0.05	MS	2242
M112	β-Asarone	45.180	208	$C_{12}H_{16}O_3$	208	5206	0.03	MS, RI, REF	2264
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	181736	0.91	MS, REF	2405
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.770	180	$C_{10}H_{12}O_3$	151	24984	0.12	MS	2520
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	51950	0.26	MS, REF	2567
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	11636	0.06	MS	2735

The note of Table S2 is also suitable for Table S9.

Table S10. The information of 42 VOCs identified in the kidney of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M9	Eucalyptol	7.095	154	$C_{10}H_{18}O$	81	12615	0.06	MS, RI	1205
M15	*cis*-Limonene oxide	13.135	152	$C_{10}H_{16}O$	137	28661	0.15	MS, RI	1441
M20	*dl*-Camphor	15.305	152	$C_{10}H_{16}O$	95	308053	1.58	MS, RI	1508
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	1868768	9.59	MS, REF	1544
M28	Fenchol	18.920	154	$C_{10}H_{18}O$	81	13206	0.07	MS, RI	1581
M35	Umbellulone	21.815	150	$C_{10}H_{14}O$	108	14764	0.08	MS, RI	1631
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	34485	0.18	MS, RI, REF	1664
M39	Verbenol	24.570	152	$C_{10}H_{16}O$	57	6167	0.03	MS, RI	1674
M40	Eucarvone isomer	24.990	150	$C_{10}H_{14}O$	107	47889	0.25	MS	1680
M41	Verbenone	25.240	150	$C_{10}H_{14}O$	107	14711	0.08	MS, RI	1684
M44	Borneol	25.875	154	$C_{10}H_{18}O$	95	736722	3.78	MS, RI	1695
M46	Piperitone	26.610	152	$C_{10}H_{16}O$	82	55510	0.28	MS, RI	1706
M49	Berbenone	28.190	150	$C_{10}H_{14}O$	150	78325	0.40	MS, RI	1731
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	4634721	23.78	MS, RI, REF	1841
M62	2,3-Dimethyldecahydronaphthalene	34.995	166	$C_{12}H_{22}$	95	13308	0.07	MS	1859
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	2475969	12.70	MS, RI, REF	1863
M67	Verbenone isomer	36.360	150	$C_{10}H_{14}O$	150	19107	0.10	MS	1895
M74	Thymoquinone	38.880	164	$C_{10}H_{12}O_2$	149	42886	0.22	MS	1981
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	877462	4.50	MS, RI, REF	2011
M81	Isosafrole	39.925	162	$C_{10}H_{10}O_2$	104	1796	0.01	MS, RI	2020
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	2581811	13.25	REF	2041
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	2784807	14.29	MS, RI, REF	2048
M84	3,4,5-Trimethoxybenzoic acid	40.780	212	$C_{10}H_{12}O_5$	212	11601	0.06	MS	2055
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	286084	1.47	MS	2096
M88	Dihydroeugenol	41.970	166	$C_{10}H_{14}O_2$	137	20178	0.10	MS, RI	2106
M93	Eugenol	43.250	164	$C_{10}H_{12}O_2$	164	220027	1.13	MS, RI, REF	2166
M94	1,2,4-Trimethoxybenzene isomer	43.565	168	$C_9H_{12}O_3$	153	336281	1.73	MS	2181
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	326765	1.68	MS, RI	2189
M99	*p*-Methoxypropiophenone	43.910	164	$C_{10}H_{12}O_2$	135	18242	0.09	MS	2197
M107	Elemicin	44.505	208	$C_{12}H_{16}O_3$	208	23812	0.12	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.765	182	$C_{10}H_{14}O_3$	182	8457	0.04	MS	2242
M112	β-Asarone	45.180	208	$C_{12}H_{16}O_3$	208	4704	0.02	MS, RI, REF	2264
M115	1,2,4-Trimethoxybenzene isomer	46.360	168	$C_9H_{12}O_3$	153	63038	0.32	MS	2334
M117	Chavicol	46.605	134	$C_9H_{10}O$	134	4596	0.02	MS, RI	2351
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	196067	1.01	MS, REF	2405
M127	Kakuol isomer	47.895	194	$C_{10}H_{10}O_4$	165	88408	0.45	MS	2447
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.770	180	$C_{10}H_{12}O_3$	151	10303	0.05	MS	2521
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	1134627	5.82	MS, REF	2567
M139	2',4'-Dimethoxy-3'-methylpropiophenone isomer	49.690	208	$C_{12}H_{16}O_3$	179	16160	0.08	MS	2602
M140	Xanthoxylin	49.760	196	$C_{10}H_{10}O_4$	181	13113	0.07	MS	2608
M147	Dihydromethyleugenol	51.135	180	$C_{11}H_{16}O_2$	151	17373	0.09	MS	2714
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	38618	0.20	MS	2735

The note of Table S2 is also suitable for Table S10.

Table S11. The information of 62 VOCs identified in the stomach of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M3	β-Pinene	4.955	136	$C_{10}H_{16}$	93	17937	0.01	MS, RI, REF	1099
M5	3-Carene	5.700	136	$C_{10}H_{16}$	93	23745	0.01	MS, RI	1135
M6	β-Myrcene	6.080	136	$C_{10}H_{16}$	93	9704	0.00	MS, RI	1154
M7	*d*-4-Carene	6.405	136	$C_{10}H_{16}$	93	3437	0.00	MS, RI	1170
M8	Limonene	6.830	136	$C_{10}H_{16}$	93	10445	0.00	MS, RI, REF	1191
M9	Eucalyptol	7.095	154	$C_{10}H_{18}O$	81	10640	0.01	MS, RI	1203
M10	*o*-Cymene	8.630	134	$C_{10}H_{14}$	119	55805	0.03	MS, RI	1268
M11	Terpinolene	8.895	136	$C_{10}H_{16}$	93	5099	0.00	MS, RI	1280
M14	*p*-Cymenene	12.885	132	$C_{10}H_{12}$	117	20044	0.01	MS, RI	1433
M20	*dl*-Camphor	15.305	152	$C_{10}H_{16}O$	95	105363	0.05	MS, RI	1507
M21	1-Pentadecene	16.070	210	$C_{15}H_{30}$	69	59636	0.03	MS, RI	1523
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	984854	0.47	MS, REF	1543
M23	*l*-Aristolene	17.560	204	$C_{15}H_{24}$	105	21674	0.01	MS, RI	1553
M26	Bornyl acetate	18.305	196	$C_{12}H_{20}O_2$	95	7402	0.00	MS, RI	1568
M27	1(10)-Aristolene	18.760	204	$C_{15}H_{24}$	161	140429	0.07	MS, RI	1577
M29	Thymol methyl ether	19.390	164	$C_{11}H_{16}O$	149	156458	0.07	MS, RI	1590
M30	*l*-Aristolene isomer	19.650	204	$C_{15}H_{24}$	105	59094	0.03	MS	1596
M31	β-Cyclocitral	20.510	152	$C_{10}H_{16}O$	137	13979	0.01	MS, RI	1610
M34	δ-Guaiene	21.535	204	$C_{15}H_{24}$	93	43622	0.02	MS, RI	1626
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	790331	0.37	MS, RI, REF	1664
M42	α-Terpineol acetate	25.300	196	$C_{12}H_{20}O_2$	121	38472	0.02	MS, RI	1685
M44	Borneol	25.875	154	$C_{10}H_{18}O$	95	3043428	1.44	MS, RI	1694
M46	Piperitone	26.610	152	$C_{10}H_{16}O$	82	32199	0.02	MS, RI	1706
M49	Berbenone	28.190	150	$C_{10}H_{14}O$	150	16935	0.01	MS, RI	1730
M56	Cuparene	32.520	202	$C_{15}H_{22}$	81	15065	0.01	MS, RI	1797
M59	*cis*-Carveol	34.050	152	$C_{10}H_{16}O$	109	7714	0.00	MS, RI	1836
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	35161970	16.67	MS, RI, REF	1842
M61	*p*-Cymen-8-ol	34.660	150	$C_{10}H_{14}O$	135	101117	0.05	MS, RI	1852
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	46536941	22.07	MS, RI, REF	1865
M70	3,4-Methylenedioxyanisole	37.450	152	$C_8H_8O_3$	152	24961	0.01	MS	1931
M73	2-Allyl-1,4-dimethoxybenzene	38.535	178	$C_{11}H_{14}O_2$	178	38310	0.02	MS	1968
M75	Methyleugenol isomer	39.055	178	$C_{11}H_{14}O_2$	178	226534	0.11	MS	1986
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	34994264	16.59	MS, RI, REF	2014
M81	Isosafrole	39.925	162	$C_{10}H_{10}O_2$	162	38093	0.02	MS, RI	2020
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	18837881	8.93	REF	2042
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	17072337	8.10	MS, RI, REF	2050
M84	3,4,5-Trimethoxybenzoic acid	40.780	212	$C_{10}H_{12}O_5$	212	186084	0.09	MS	2056
M85	Globulol	40.910	222	$C_{15}H_{26}O$	95	27361	0.01	MS, RI	2062
M86	1,2,4-Trimethoxybenzene	41.430	168	$C_9H_{12}O_3$	168	6800	0.00	MS, RI	2083
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	9026023	4.28	MS	2097
M89	Spathulenol	42.110	220	$C_{15}H_{24}O$	205	18646	0.01	MS, RI	2113
M91	Viridiflorol	42.310	222	$C_{15}H_{26}O$	107	19235	0.01	MS, RI	2122
M92	Patchoulol	43.065	222	$C_{15}H_{26}O$	83	66947	0.03	MS, RI	2157
M93	Eugenol	43.250	164	$C_{10}H_{12}O_2$	164	198164	0.09	MS, RI, REF	2167
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	26607474	12.62	MS, RI	2191
M101	α-Bisabolol	44.200	222	$C_{15}H_{26}O$	69	46602	0.02	MS, RI	2212
M105	Isothymol	44.390	150	$C_{10}H_{14}O$	135	75209	0.04	MS, RI	2222
M107	Elemicin	44.505	208	$C_{12}H_{16}O_3$	208	1202961	0.57	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.765	182	$C_{10}H_{14}O_3$	182	62708	0.03	MS	2242
M110	Isospathulenol	44.935	220	$C_{15}H_{24}O$	119	17807	0.01	MS, RI	2251
M112	β-Asarone	45.180	208	$C_{12}H_{16}O_3$	208	279835	0.13	MS, RI, REF	2264
M119	Kaurene	46.785	272	$C_{20}H_{32}$	257	9673	0.00	MS, RI	2363
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	3304576	1.57	MS, REF	2406
M123	Apiol	47.510	222	$C_{12}H_{14}O_4$	222	15846	0.01	MS, RI	2415
M127	Kakuol isomer	47.895	194	$C_{10}H_{10}O_4$	165	274838	0.13	MS	2447
M128	Mellein	48.255	178	$C_{10}H_{10}O_3$	178	13794	0.01	MS, RI	2476
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	8577238	4.07	MS, REF	2568
M139	2',4'-Dimethoxy-3'-methylpropiophenone isomer	49.690	208	$C_{12}H_{16}O_3$	179	126691	0.06	MS	2602
M140	Xanthoxylin	49.760	196	$C_{10}H_{10}O_4$	181	172365	0.08	MS	2608
M144	4-(Dimethoxymethyl)-1,2-dimethoxybenzene	50.615	212	$C_{11}H_{16}O_4$	181	22593	0.01	MS	2676
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	1763142	0.84	MS	2735
M151	1,2-Dimethoxy-4-(1,2-dimethoxyethyl)-benzene	52.195	226	$C_{12}H_{18}O_4$	181	26600	0.01	MS	2785

The note of Table S2 is also suitable for Table S11.

Table S12. The information of 34 VOCs identified in the small intestine of rats in ARR powder-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M5	3-Carene	5.700	136	$C_{10}H_{16}$	93	5960	0.01	MS, RI	1136
M9	Eucalyptol	7.095	154	$C_{10}H_{18}O$	81	3970	0.01	MS, RI	1203
M20	*dl*-Camphor	15.305	152	$C_{10}H_{16}O$	95	38131	0.06	MS, RI	1507
M22	Eucarvone	17.060	150	$C_{10}H_{14}O$	107	342083	0.51	MS, REF	1543
M29	Thymol methyl ether	19.390	164	$C_{11}H_{16}O$	149	31430	0.05	MS, RI	1590
M37	Estragole	23.905	148	$C_{10}H_{12}O$	148	237350	0.35	MS, RI, REF	1664
M44	Borneol	25.875	154	$C_{10}H_{18}O$	95	965443	1.44	MS, RI	1694
M60	3,5-Dimethoxytoluene	34.260	152	$C_9H_{12}O_2$	152	13063274	19.44	MS, RI, REF	1841
M64	Safrole	35.110	162	$C_{10}H_{10}O_2$	162	16022242	23.84	MS, RI, REF	1864
M75	Methyleugenol isomer	39.055	178	$C_{11}H_{14}O_2$	178	47726	0.07	MS	1987
M79	Methyleugenol	39.715	178	$C_{11}H_{14}O_2$	178	12384980	18.43	MS, RI, REF	2012
M81	Isosafrole	39.925	162	$C_{10}H_{10}O_2$	162	8074	0.01	MS, RI	2020
M82	2,3,5-Trimethoxytoluene	40.415	182	$C_{10}H_{14}O_3$	167	6558575	9.76	REF	2041
M83	3,4,5-Trimethoxytoluene	40.610	182	$C_{10}H_{14}O_3$	182	5829924	8.68	MS, RI, REF	2049
M84	3,4,5-Trimethoxybenzoic acid	40.780	212	$C_{10}H_{12}O_5$	212	52814	0.08	MS	2056
M85	Globulol	40.910	222	$C_{15}H_{26}O$	95	4654	0.01	MS, RI	2061
M87	*E*-Isocroweacin	41.755	192	$C_{11}H_{12}O_3$	192	1938867	2.89	MS	2096
M88	Dihydroeugenol	41.970	166	$C_{10}H_{14}O_2$	137	19702	0.03	MS, RI	2106
M89	Spathulenol	42.110	220	$C_{15}H_{24}O$	205	3124	0.00	MS, RI	2113
M91	Viridiflorol	42.310	222	$C_{15}H_{26}O$	107	3628	0.01	MS, RI	2122
M92	Patchoulol	43.065	222	$C_{15}H_{26}O$	83	12351	0.02	MS, RI	2157
M93	Eugenol	43.250	164	$C_{10}H_{12}O_2$	164	59577	0.09	MS, RI, REF	2166
M95	4-Methoxysafrole	43.745	192	$C_{11}H_{12}O_3$	192	5769570	8.59	MS, RI	2190
M99	*p*-Methoxypropiophenone	43.910	164	$C_{10}H_{12}O_2$	135	106617	0.16	MS	2197
M107	Elemicin	44.505	208	$C_{12}H_{16}O_3$	208	294399	0.44	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.765	182	$C_{10}H_{14}O_3$	182	14044	0.02	MS	2242
M122	3,4-Methylenedioxypropiophenone	47.395	178	$C_{10}H_{10}O_3$	149	786080	1.17	MS, REF	2405
M127	Kakuol isomer	47.895	194	$C_{10}H_{10}O_4$	165	69199	0.10	MS	2446
M128	Mellein	48.255	178	$C_{10}H_{10}O_3$	178	4164	0.01	MS, RI	2476
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.770	180	$C_{10}H_{12}O_3$	151	66510	0.10	MS	2520
M138	Kakuol	49.295	194	$C_{10}H_{10}O_4$	165	2012314	2.99	MS, REF	2567
M139	2',4'-Dimethoxy-3'-methylpropiophenone isomer	49.690	208	$C_{12}H_{16}O_3$	179	35644	0.05	MS	2602
M140	Xanthoxylin	49.760	196	$C_{10}H_{10}O_4$	181	37461	0.06	MS	2608
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.435	208	$C_{12}H_{16}O_3$	179	370511	0.55	MS	2735

The note of Table S2 is also suitable for Table S12.

Table S13. The information of 20 VOCs identified in the feces of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M12	Tridecane	9.217	184	$C_{13}H_{28}$	184	3144	0.18	MS, RI, REF	1293
M13	Acetoin	9.328	88	$C_4H_8O_2$	88	108393	6.35	MS, RI	1298
M20	*dl*-Camphor	15.291	152	$C_{10}H_{16}O$	95	8076	0.47	MS, RI	1507
M26	Bornyl acetate	18.313	196	$C_{12}H_{20}O_2$	95	5905	0.35	MS, RI	1568
M44	Borneol	25.881	154	$C_{10}H_{18}O$	95	529068	31.00	MS, RI	1694
M64	Safrole	35.108	162	$C_{10}H_{10}O_2$	162	5797	0.34	MS, RI, REF	1863
M79	Methyleugenol	39.709	178	$C_{11}H_{14}O_2$	178	5220	0.31	MS, RI, REF	2011
M81	Isosafrole	39.931	162	$C_{10}H_{10}O_2$	162	20971	1.23	MS, RI	2020
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	5492	0.32	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	11413	0.67	MS, RI, REF	2049
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	18756	1.10	MS, RI, REF	2167
M95	4-Methoxysafrole	43.747	192	$C_{11}H_{12}O_3$	192	11377	0.67	MS, RI	2190
M98	Thymol	43.870	150	$C_{10}H_{14}O$	135	110911	6.50	MS, RI	2197
M102	2-Aminoacetophenone	44.232	135	C_8H_9NO	135	51990	3.05	MS, RI	2214
M105	Isothymol	44.403	150	$C_{10}H_{14}O$	135	16787	0.98	MS, RI	2223
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	31492	1.85	MS, REF	2406
M127	Kakuol isomer	47.901	194	$C_{10}H_{10}O_4$	165	28529	1.67	MS	2447
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.777	180	$C_{10}H_{12}O_3$	151	15360	0.90	MS	2521
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	702552	41.16	MS, REF	2568
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	15469	0.91	MS	2735

The note of Table S2 is also suitable for Table S13.

Table S14. The information of 48 VOCs identified in the urine of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M20	*dl*-Camphor	15.291	152	$C_{10}H_{16}O$	95	39912	0.14	MS, RI	1507
M32	Methyl benzoate	20.816	136	$C_8H_8O_2$	136	7703	0.03	MS, RI	1615
M36	*l*-Pinocarveol	23.114	152	$C_{10}H_{16}O$	92	39104	0.14	MS, RI	1651
M44	Borneol	25.881	154	$C_{10}H_{18}O$	95	1854171	6.67	MS, RI	1694
M45	Phellandral	26.439	154	$C_{10}H_{18}O$	109	51291	0.18	MS, RI	1703
M53	Myrtenol	31.916	152	$C_{10}H_{16}O$	108	4134	0.01	MS, RI	1788
M55	3,4-Dimethylbenzaldehyde	32.061	134	$C_9H_{10}O$	134	12324	0.04	MS, RI	1790
M59	*cis*-Carveol	34.055	152	$C_{10}H_{16}O$	109	17766	0.06	MS, RI	1835
M63	Guaiacol	35.000	124	$C_7H_8O_2$	124	140078	0.50	MS, RI	1860
M64	Safrole	35.108	162	$C_{10}H_{10}O_2$	162	3814	0.01	MS, RI, REF	1862
M65	Benzyl alcohol	35.662	108	C_7H_8O	108	132548	0.48	MS, RI	1877
M68	2-Phenylethanol	36.725	122	$C_8H_{10}O$	122	61343	0.22	MS, RI	1906
M72	Creosol	38.108	138	$C_8H_{10}O_2$	138	84630	0.30	MS, RI	1954
M74	Thymoquinone	38.885	164	$C_{10}H_{12}O_2$	149	47745	0.17	MS	1981
M76	6-Allyl-*o*-cresol	39.435	148	$C_{10}H_{12}O$	148	19770	0.07	MS	2000
M79	Methyleugenol	39.709	178	$C_{11}H_{14}O_2$	178	6433	0.02	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	30224	0.11	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	317898	1.14	MS, RI, REF	2048
M88	Dihydroeugenol	41.913	166	$C_{10}H_{14}O_2$	137	735442	2.64	MS, RI	2103
M90	Dihydroeugenol isomer	42.203	166	$C_{10}H_{14}O_2$	137	71840	0.26	MS	2117
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	6582923	23.67	MS, RI, REF	2166
M94	1,2,4-Trimethoxybenzene isomer	43.589	168	$C_9H_{12}O_3$	153	635719	2.29	MS	2182
M98	Thymol	43.870	150	$C_{10}H_{14}O$	135	246441	0.89	MS, RI	2195
M104	Piperonal	44.354	150	$C_8H_6O_3$	149	329976	1.19	MS, RI	2220
M109	Methoxyeugenol isomer	44.889	194	$C_{11}H_{14}O_3$	194	16336	0.06	MS	2248
M111	*cis*-Isoeugenol	45.092	164	$C_{10}H_{12}O_2$	164	110098	0.40	MS, RI	2259
M114	1,2,3,4-Tetramethoxybenzene	45.605	198	$C_{10}H_{14}O_4$	198	27919	0.10	MS, RI	2286
M115	1,2,4-Trimethoxybenzene isomer	46.354	168	$C_9H_{12}O_3$	153	473718	1.70	MS	2334
M116	3,4-Methylenedioxyacetophenone	46.405	164	$C_9H_8O_3$	149	377751	1.36	MS	2337
M117	Chavicol	46.612	134	$C_9H_{10}O$	134	1405123	5.05	MS, RI	2351
M118	1,2,3-Trimethoxybenzene isomer	46.687	168	$C_9H_{12}O_3$	168	387185	1.39	MS	2356
M121	Methoxyeugenol isomer	47.304	194	$C_{11}H_{14}O_3$	194	10340	0.04	MS	2398
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	99288	0.36	MS, REF	2405
M126	Methoxyeugenol isomer	47.845	194	$C_{11}H_{14}O_3$	194	227149	0.82	MS	2442
M127	Kakuol isomer	47.901	194	$C_{10}H_{10}O_4$	165	624505	2.25	MS	2447
M128	Mellein	48.262	178	$C_{10}H_{10}O_3$	178	29777	0.11	MS, RI	2476
M130	2,6-Dimethoxyacetophenone	48.585	180	$C_{10}H_{12}O_3$	180	5568	0.02	MS	2503
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.777	180	$C_{10}H_{12}O_3$	151	51400	0.18	MS	2521
M132	Piperonol	48.928	152	$C_8H_8O_3$	152	15637	0.06	MS	2534
M134	3-Methoxy-5-methylphenol	48.993	138	$C_8H_{10}O_2$	138	1316473	4.73	MS, RI	2540
M137	Methoxyeugenol	49.069	194	$C_{11}H_{14}O_3$	194	104000	0.37	MS, RI	2547
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	10509763	37.79	MS, REF	2568
M139	2',4'-Dimethoxy-3'-methylpropiophenone isomer	49.690	208	$C_{12}H_{16}O_3$	179	19389	0.07	MS	2602
M140	Xanthoxylin	49.767	196	$C_{10}H_{10}O_4$	181	347256	1.25	MS	2608
M143	3,4,5-Trimethoxyphenyl-2-propanone	50.278	224	$C_{12}H_{16}O_4$	181	27492	0.10	MS	2649
M146	Propioveratrone	50.772	194	$C_{11}H_{14}O_3$	194	27897	0.10	MS	2687
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	69691	0.25	MS	2735
M152	1-Hydroxy-2-(prop-2-enyl)-4,5-methylenedioxybenzene	52.691	178	$C_{10}H_{10}O_3$	178	51784	0.19	MS	2815

The note of Table S2 is also suitable for Table S14.

Table S15. The information of 11 VOCs identified in the blood of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M74	Thymoquinone	38.885	164	$C_{10}H_{12}O_2$	149	6902	1.48	MS	1981
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	32355	6.94	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	305666	65.52	MS, RI, REF	2048
M97	2,4,5-Trimethoxybenzoic acid	43.823	212	$C_{10}H_{12}O_5$	212	5925	1.27	MS	2193
M104	Piperonal	44.354	150	$C_8H_6O_3$	149	3635	0.78	MS, RI	2220
M107	Elemicin	44.508	208	$C_{12}H_{16}O_3$	208	2416	0.52	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.767	182	$C_{10}H_{14}O_3$	182	10389	2.23	MS	2242
M116	3,4-Methylenedioxyacetophenone	46.405	164	$C_9H_8O_3$	149	25361	5.44	MS	2337
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	14147	3.03	MS, REF	2405
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	15402	3.30	MS, REF	2568
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	44317	9.50	MS	2735

The note of Table S2 is also suitable for Table S15.

Table S16. The information of five VOCs identified in the brain of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	7317	9.26	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	61790	78.18	MS, RI, REF	2048
M107	Elemicin	44.508	208	$C_{12}H_{16}O_3$	208	1032	1.31	MS, RI, REF	2228
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	3709	4.69	MS, REF	2405
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	5186	6.56	MS, REF	2567

The note of Table S2 is also suitable for Table S16.

Table S17. The information of five VOCs identified in the heart of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	6880	10.06	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	48886	71.51	MS, RI, REF	2048
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	4184	6.12	MS, RI, REF	2167
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	3580	5.24	MS, REF	2406
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	4831	7.07	MS, REF	2568

The note of Table S2 is also suitable for Table S17.

Table S18. The information of seven VOCs identified in the lung of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	8005	7.86	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	52785	51.81	MS, RI, REF	2048
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	10359	10.17	MS, RI, REF	2166
M115	1,2,4-Trimethoxybenzene isomer	46.354	168	$C_9H_{12}O_3$	153	1076	1.06	MS	2334
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	2694	2.64	MS, REF	2405
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	7861	7.72	MS, REF	2568
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	19097	18.75	MS	2735

The note of Table S2 is also suitable for Table S18.

Table S19. The information of nine VOCs identified in the spleen of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M64	Safrole	35.108	162	$C_{10}H_{10}O_2$	162	416	0.39	MS, RI, REF	1862
M79	Methyleugenol	39.709	178	$C_{11}H_{14}O_2$	178	1640	1.53	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	9348	8.72	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	64942	60.58	MS, RI, REF	2048
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	7274	6.79	MS, RI, REF	2166
M107	Elemicin	44.508	208	$C_{12}H_{16}O_3$	208	1458	1.36	MS, RI, REF	2228
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	4218	3.93	MS, REF	2405
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	7466	6.96	MS, REF	2568
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	10432	9.73	MS	2735

The note of Table S2 is also suitable for Table S19.

Table S20. The information of 18 VOCs identified in the liver of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M20	*dl*-Camphor	15.291	152	$C_{10}H_{16}O$	95	2153	0.43	MS, RI	1507
M43	4-Ethylbenzaldehyde	25.836	134	$C_9H_{10}O$	134	56455	11.40	MS, RI	1694
M60	3,5-Dimethoxytoluene	34.265	152	$C_9H_{12}O_2$	152	1688	0.34	MS, RI, REF	1841
M64	Safrole	35.108	162	$C_{10}H_{10}O_2$	162	1238	0.25	MS, RI, REF	1862
M74	Thymoquinone	38.885	164	$C_{10}H_{12}O_2$	149	11724	2.37	MS	1981
M79	Methyleugenol	39.709	178	$C_{11}H_{14}O_2$	178	3244	0.65	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	30844	6.23	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	241327	48.72	MS, RI, REF	2048
M88	Dihydroeugenol	41.913	166	$C_{10}H_{14}O_2$	137	1906	0.38	MS, RI	2103
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	18209	3.68	MS, RI	2166
M107	Elemicin	44.508	208	$C_{12}H_{16}O_3$	208	3721	0.75	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.767	182	$C_{10}H_{14}O_3$	182	7437	1.50	MS	2242
M115	1,2,4-Trimethoxybenzene isomer	46.354	168	$C_9H_{12}O_3$	153	1694	0.34	MS	2334
M117	Chavicol	46.612	134	$C_9H_{10}O$	134	4782	0.97	MS, RI	2351
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	18247	3.68	MS, REF	2405
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.777	180	$C_{10}H_{12}O_3$	151	2935	0.59	MS	2521
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	42059	8.49	MS, REF	2568
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	45693	9.22	MS	2735

The note of Table S2 is also suitable for Table S20.

Table S21. The information of 26 VOCs identified in the kidney of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M15	*cis*-Limonene oxide	13.131	152	$C_{10}H_{16}O$	137	3031	0.18	MS, RI	1441
M20	*dl*-Camphor	15.291	152	$C_{10}H_{16}O$	95	31696	1.93	MS, RI	1507
M22	Eucarvone	17.067	150	$C_{10}H_{14}O$	107	3448	0.21	MS, REF	1543
M40	Eucarvone isomer	25.014	150	$C_{10}H_{14}O$	107	3969	0.24	MS	1680
M44	Borneol	25.881	154	$C_{10}H_{18}O$	95	72403	4.42	MS, RI	1694
M60	3,5-Dimethoxytoluene	34.265	152	$C_9H_{12}O_2$	152	1907	0.12	MS, RI	1841
M64	Safrole	35.108	162	$C_{10}H_{10}O_2$	162	1811	0.11	MS, RI, REF	1862
M66	Verbenone isomer	36.215	150	$C_{10}H_{14}O$	150	9297	0.57	MS	1891
M74	Thymoquinone	38.885	164	$C_{10}H_{12}O_2$	149	139229	8.50	MS	1981
M79	Methyleugenol	39.709	178	$C_{11}H_{14}O_2$	178	5070	0.31	MS, RI	2011
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	55625	3.39	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	557810	34.04	MS, RI, REF	2048
M84	3,4,5-Trimethoxybenzoic acid	40.787	212	$C_{10}H_{12}O_5$	212	843	0.05	MS	2056
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	232132	14.16	MS, RI	2166
M97	2,4,5-Trimethoxybenzoic acid	43.823	212	$C_{10}H_{12}O_5$	212	7656	0.47	MS	2193
M107	Elemicin	44.508	208	$C_{12}H_{16}O_3$	208	4490	0.27	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.767	182	$C_{10}H_{14}O_3$	182	12478	0.76	MS	2242
M115	1,2,4-Trimethoxybenzene isomer	46.354	168	$C_9H_{12}O_3$	153	31550	1.93	MS	2334
M117	Chavicol	46.612	134	$C_9H_{10}O$	134	19571	1.19	MS, RI	2351
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	19096	1.17	MS, REF	2405
M127	Kakuol isomer	47.901	194	$C_{10}H_{10}O_4$	165	8616	0.53	MS	2447
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.777	180	$C_{10}H_{12}O_3$	151	2958	0.18	MS	2521
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	313796	19.15	MS, REF	2568
M139	2',4'-Dimethoxy-3'-methylpropiophenone isomer	49.690	208	$C_{12}H_{16}O_3$	179	41301	2.52	MS	2602
M142	2',4'-Dimethoxy-3'-methylpropiophenone isomer	50.226	208	$C_{12}H_{16}O_3$	179	8877	0.54	MS	2645
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	50176	3.06	MS	2735

The note of Table S2 is also suitable for Table S21.

Table S22. The information of 32 VOCs identified in the stomach of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M10	*o*-Cymene	8.646	134	$C_{10}H_{14}$	119	2769	0.03	MS, RI	1269
M19	Pentadecane	14.953	212	$C_{15}H_{32}$	85	93104	1.17	MS, RI	1500
M20	*dl*-Camphor	15.291	152	$C_{10}H_{16}O$	95	1544	0.02	MS, RI	1507
M44	Borneol	25.881	154	$C_{10}H_{18}O$	95	18466	0.23	MS, RI	1694
M60	3,5-Dimethoxytoluene	34.265	152	$C_9H_{12}O_2$	152	2529	0.03	MS, RI, REF	1841
M74	Thymoquinone	38.885	164	$C_{10}H_{12}O_2$	149	4928	0.06	MS	1981
M79	Methyleugenol	39.709	178	$C_{11}H_{14}O_2$	178	80069	1.00	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	292668	3.66	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	1895207	23.72	MS, RI, REF	2048
M84	3,4,5-Trimethoxybenzoic acid	40.787	212	$C_{10}H_{12}O_5$	212	9511	0.12	MS	2056
M86	1,2,4-Trimethoxybenzene	41.437	168	$C_9H_{12}O_3$	168	3192	0.04	MS, RI	2083
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	47827	0.60	MS, RI, REF	2166
M95	4-Methoxysafrole	43.747	192	$C_{11}H_{12}O_3$	192	7727	0.10	MS, RI	2189
M97	2,4,5-Trimethoxybenzoic acid	43.823	212	$C_{10}H_{12}O_5$	212	38856	0.49	MS	2193
M107	Elemicin	44.508	208	$C_{12}H_{16}O_3$	208	110865	1.39	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.767	182	$C_{10}H_{14}O_3$	182	36703	0.46	MS	2242
M112	β-Asarone	45.186	208	$C_{12}H_{16}O_3$	208	16725	0.21	MS, RI, REF	2264
M116	3,4-Methylenedioxyacetophenone	46.405	164	$C_9H_8O_3$	149	9412	0.12	MS	2337
M117	Chavicol	46.612	134	$C_9H_{10}O$	134	12360	0.15	MS, RI	2351
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	1239697	15.51	MS, REF	2405
M126	Methoxyeugenol isomer	47.845	194	$C_{11}H_{14}O_3$	194	8106	0.10	MS	2442
M127	Kakuol isomer	47.901	194	$C_{10}H_{10}O_4$	165	33782	0.42	MS	2447
M128	Mellein	48.262	178	$C_{10}H_{10}O_3$	178	6404	0.08	MS, RI	2476
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.777	180	$C_{10}H_{12}O_3$	151	54614	0.68	MS	2521
M136	4,6-Dimethoxy-phthalide	49.065	194	$C_{10}H_{10}O_4$	194	18922	0.24	MS	2546
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	2362595	29.56	MS, RI, REF	2568
M139	2',4'-Dimethoxy-3'-methylpropiophenone isomer	49.690	208	$C_{12}H_{16}O_3$	179	107242	1.34	MS	2602
M140	Xanthoxylin	49.767	196	$C_{10}H_{10}O_4$	181	45209	0.57	MS	2608
M144	4-(Dimethoxymethyl)-1,2-dimethoxybenzene	50.621	212	$C_{11}H_{16}O_4$	181	15560	0.19	MS	2676
M145	2',4'-Dimethoxypropiophenone	50.760	194	$C_{11}H_{14}O_3$	194	5452	0.07	MS	2687
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	1392210	17.42	MS	2735
M151	1,2-Dimethoxy-4-(1,2-dimethoxyethyl)-benzene	52.205	226	$C_{12}H_{18}O_4$	181	17021	0.21	MS	2786

The note of Table S2 is also suitable for Table S22.

Table S23. The information of 19 VOCs identified in the small intestine of rats in ARR decoction-treated group by HS-SPME-GC-MS

No.	Compounds	t_R (min)	MW	Formula	Ion	Area	C (%)	Identification	RI
M20	*dl*-Camphor	15.291	152	$C_{10}H_{16}O$	95	2376	0.31	MS, RI	1507
M60	3,5-Dimethoxytoluene	34.265	152	$C_9H_{12}O_2$	152	2141	0.28	MS, RI, REF	1841
M64	Safrole	35.108	162	$C_{10}H_{10}O_2$	162	2499	0.32	MS, RI, REF	1863
M79	Methyleugenol	39.709	178	$C_{11}H_{14}O_2$	178	6909	0.90	MS, RI, REF	2011
M82	2,3,5-Trimethoxytoluene	40.407	182	$C_{10}H_{14}O_3$	167	26107	3.39	REF	2040
M83	3,4,5-Trimethoxytoluene	40.608	182	$C_{10}H_{14}O_3$	182	133284	17.30	MS, RI, REF	2049
M93	Eugenol	43.255	164	$C_{10}H_{12}O_2$	164	118092	15.33	MS, RI, REF	2167
M98	Thymol	43.870	150	$C_{10}H_{14}O$	135	4450	0.58	MS, RI	2197
M107	Elemicin	44.508	208	$C_{12}H_{16}O_3$	208	6991	0.91	MS, RI, REF	2228
M108	3,4,5-Trimethoxytoluene isomer	44.767	182	$C_{10}H_{14}O_3$	182	3286	0.43	MS	2242
M115	1,2,4-Trimethoxybenzene isomer	46.354	168	$C_9H_{12}O_3$	153	17542	2.28	MS	2335
M117	Chavicol	46.612	134	$C_9H_{10}O$	134	33855	4.39	MS, RI	2351
M122	3,4-Methylenedioxypropiophenone	47.392	178	$C_{10}H_{10}O_3$	149	40703	5.28	MS, REF	2406
M131	1-(3,4-Methylenedioxyphenyl)-propane-1-ol	48.777	180	$C_{10}H_{12}O_3$	151	9822	1.27	MS	2521
M134	3-Methoxy-5-methylphenol	48.993	138	$C_8H_{10}O_2$	138	74624	9.68	MS, RI	2540
M138	Kakuol	49.294	194	$C_{10}H_{10}O_4$	165	219150	28.44	MS, REF	2568
M139	2',4'-Dimethoxy-3'-methylpropiophenone isomer	49.690	208	$C_{12}H_{16}O_3$	179	5841	0.76	MS	2603
M140	Xanthoxylin	49.767	196	$C_{10}H_{10}O_4$	181	5654	0.73	MS	2608
M148	2',4'-Dimethoxy-3'-methylpropiophenone	51.439	208	$C_{12}H_{16}O_3$	179	57247	7.43	MS	2735

The note of Table S2 is also suitable for Table S23.