

Table S1

Information and composition of DSHT.

Herbal medicine	Scientific name	English name	Family	Used part	Origin	Amount (g)
Bupleuri Radix	<i>Bupleurum falcatum</i> L.	Bupleurum Root	Apiaceae	Root	Cheongsong, Korea	1481.0
Scutellariae Radix	<i>Scutellaria baicalensis</i> Georgi	Scutellaria Root	Lamiaceae	Root	Yeosu, Korea	926.1
Paeoniae Radix	<i>Paeonia lactiflora</i> Pall.	Peony Root	Paeoniaceae	Root	Uiseong, Korea	926.1
Rhei Radix et Rhizoma	<i>Rheum palmatum</i> L.	Rhubarb	Polygonaceae	Root and Rhizome	China	740.5
Ponciri Fructus Immaturus	<i>Poncirus trifoliata</i> (L.) Raf.	Poncirus Immature Fruit	Rutaceae	Unaccustomed Fruit	Bonghwa, Korea	556.0
Pinelliae Tuber	<i>Pinellia ternata</i> (Thunb.) Makino	Pinellia Tuber	Araceae	Tuber	China	370.3
						Total (g)
						5000.0

Table S2

HPLC analysis conditions for simultaneous determination of the 10 marker components in DSHT.

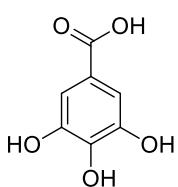
HPLC analysis parameter		
HPLC system	Prominence LC-20A series (Shimadzu, Kyoto, Japan)	
Detector	Diode array detector	
Detection wavelength (nm)	230, 270, 275, and 280	
Column	SunFire C18 (4.6 × 250 mm, 5 µm, Waters, Milford, MA, USA)	
Column oven temperature (°C)	40.0	
Flow rate (mL/min)	1.0	
Injection volume (µL)	10.0	
Mobile phase	A: 0.1% (v/v) formic acid in distilled water B: 0.1% (v/v) formic acid in acetonitrile	
Gradient elution	Time (min)	A (%)
	0	95
	40	40
	50	0
	55	0
	60	95
	70	95
Runtime (min)		70

Table S3Repeatability of the retention times of the 10 markers in HPLC analysis ($n = 6$).

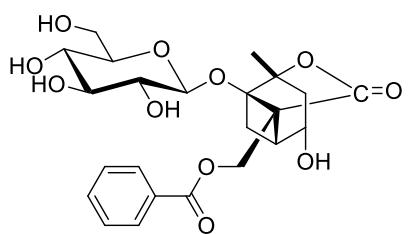
Analyte	No., Retention time (min)								
	1	2	3	4	5	6	Mean	SD	RSD (%)
Gallic acid	6.46	6.47	6.57	6.50	6.50	6.43	6.49	0.05	0.73
Albiflorin	16.40	16.45	16.45	16.44	16.48	16.46	16.45	0.03	0.16
Paeoniflorin	17.27	17.31	17.32	17.31	17.36	17.33	17.32	0.03	0.16
Naringin	21.09	21.12	21.09	21.12	21.14	21.09	21.11	0.02	0.09
Benzoic acid	23.19	23.22	23.21	23.23	23.24	23.20	23.22	0.02	0.08
Baicalin	26.32	26.33	26.32	26.34	26.33	26.30	26.32	0.01	0.05
Poncirin	26.76	26.76	26.76	26.77	26.76	26.74	26.76	0.01	0.04
Wogonoside	29.99	30.00	29.99	29.98	29.99	29.97	29.98	0.01	0.03
Baicalein	32.35	32.35	32.34	32.35	32.34	32.33	32.34	0.01	0.02
Wogonin	38.08	38.08	38.08	38.08	38.06	38.06	38.07	0.01	0.02

Table S4Repeatability for peak area of the 10 markers in HPLC analysis ($n = 6$).

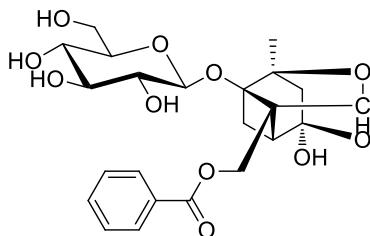
Analyte	No., Peak area						Mean	SD	RSD (%)
	1	2	3	4	5	6			
Gallic acid	3308436	3336549	3357145	3351670	3367233	3358118	3346525.17	21226.24	0.63
Albiflorin	1135835	1154788	1163431	1159920	1157159	1165612	1156124.17	10698.82	0.93
Paeoniflorin	225150	220790	224243	222524	223149	222431	223047.83	1523.84	0.68
Naringin	1753657	1763064	1769873	1775430	1777131	1776017	1769195.33	9250.66	0.52
Benzoic acid	2387312	2408786	2411109	2433469	2415219	2417783	2412279.67	14999.16	0.62
Baicalin	3102241	3116050	3130772	3134680	3142156	3144193	3128348.67	16251.22	0.52
Poncirin	1856107	1869591	1875631	1881772	1883817	1884337	1875209.17	10928.11	0.58
Wogonoside	2596494	2616589	2623775	2627471	2631897	2632955	2621530.17	13634.92	0.52
Baicalein	1489740	1513262	1512675	1528542	1528531	1524515	1516210.83	14796.66	0.98
Wogonin	2847671	2867181	2877178	2880591	2885370	2885301	2873882.00	14492.49	0.50



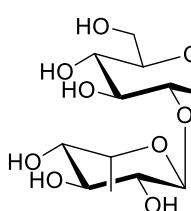
Gallic acid



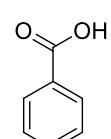
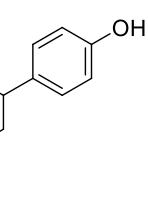
Albiflorin



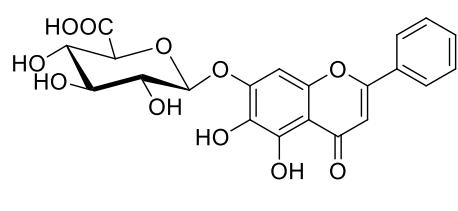
Paeniflorin



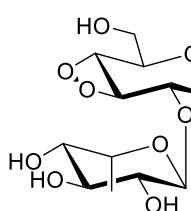
Naringin



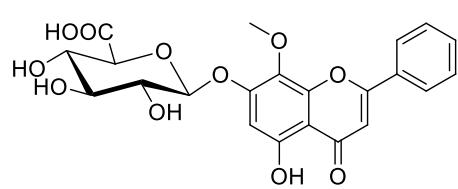
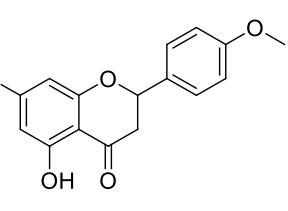
Benzoic acid



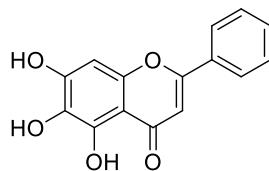
Baicalin



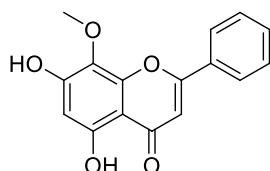
Poncirin



Wogonoside



Baicalein



Wogonin

Figure S1. Chemical structures of the 10 marker components in DSHT.

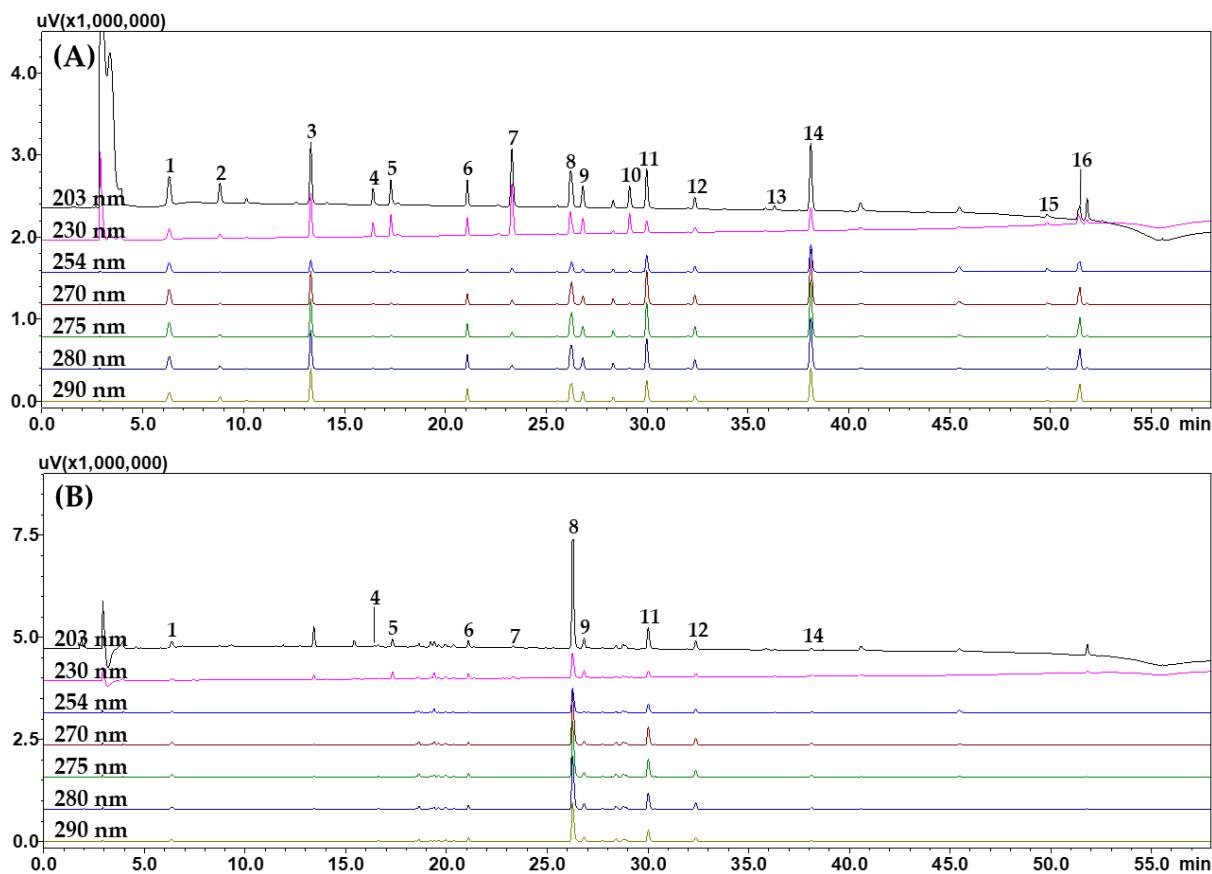


Figure S2. HPLC chromatogram of the mixed 16 standard solution (A) and DSHT sample (B). Gallic acid (**1**), homogentisic acid (**2**), 3,4-dihydroxybenzaldehyde (**3**), albiflorin (**4**), paeoniflorin (**5**), naringin (**6**), benzoic acid (**7**), baicalin (**8**), poncirin (**9**), benzoylpaeoniflorin (**10**), wogonoside (**11**), baicalein (**12**), saikosaponin A (**13**), wogonin (**14**), chrysophanol (**15**), and physcion (**16**).