

Table S1. HPLC columns used for the analysis of various phytochemicals

Column type / dimensions	Manufacturer (City, Country)	Representative compounds / groups analyzed	Detection mode
CAPCELL PAK C18 (150 mm × 4.6 mm, 5.0 μm)	OSAKA SODA, Osaka, Japan	Pilocarpine hydrochloride, sclareol, (–)-cytisine, (–)-dihydroquinine, (+)-bicuculline, carminic acid (natural dye), colchicine, cromolyn sodium salt, wogonoside, wogonin, (+)-taxifolin, tanshinone IIA, rutaecarpine, reserpine, piperlongumine, phenethyl caffeate, limonin, jatrorrhizine chloride, icariin, and harmol	UV
TSKgel G4000PWXL column (300 mm × 7.8 mm I.D, 10 μm)	TOSOH, Tokyo, Japan	Xylan from Corn Core, ι-Carrageenan, κ-Carrageenan, and λ-Carrageenan (Low-viscosity)	ELSD
Imtakt Intrada Amino Acid (150 mm × 3.0 mm, 3.0 μm)	Imtakt, Kyoto, Japan	Cholecalciferol	UV
ZORBAX Eclipse XDB-C18 (250 mm × 4.6 mm, 5.0 μm)	Agilent Technologies, Santa Clara, CA, USA	Ursolic acid	UV
Cadenza CD-C18 (250 mm × 3 mm, 3.0 μm)	Imtakt, Kyoto, Japan	Ginsenosides, gypenoside A, gypenoside L, gypenoside XLIX, and gypenoside XVII	UV
YMC-PACK ODS-A (150 mm × 4.6 mm, 5.0 μm)	YMC, Kyoto, Japan	All other phytochemicals not listed above (general-purpose method)	UV

Table S2. Bioanalytical method validation of various phytochemicals

Compound	UV (nm)	RT (min)	Conc. Range (µg/mL)	Regression Equation (R ²)	Accuracy (%)	Precision (%RSD)	LOD (µg/mL)	LOQ (µg/mL)
Alkaloids								
(-)-Cytisine	310	1.7	1 ~ 50	$y=100740x+5066.7$ (0.9998)	97.8 ~ 122.2	0.08 ~ 1.39	0.03	0.1
(-)-Dihydroquinine	310	10	1 ~ 50	$y=33450x-2576.7$ (1)	99.0 ~ 104.8	0.32 ~ 1.12	0.05	0.17
(+)-Bicuculline	254	10.9	5 ~ 50	$y=161024x+212039$ (0.9953)	83.0 ~ 114.9	0.26 ~ 0.42	0.04	0.14
(±)-Evodiamine	280	22	1 ~ 50	$y=27508x-8822.6$ (0.9996)	95.3 ~ 127.2	0.06 ~ 0.76	0.02	0.07
(S)-(+)-Camptothecin	360	13.2	1 ~ 50	$y=70252x+23239$ (0.9995)	70.4 ~ 103.1	0.30 ~ 0.60	0.05	0.17
Aegeline	280	16.8	1 ~ 50	$y=36070x+1866.4$ (0.9999)	91.6 ~ 101.4	0.03 ~ 0.22	0.01	0.05
Atropine	254	3.1	1 ~ 50	$y=4831.5x-2092.7$ (0.9994)	96.2 ~ 125.7	0.04 ~ 9.03	1.83	5.57
Berberine Chloride Hydrate	254	12.8	5 ~ 50	$y=47898x-22383$ (0.9995)	96.6 ~ 103.3	0.31 ~ 1.57	0.43	1.33
Boldine	280	10.3	5 ~ 50	$y = 297785x - 39267$ (1)	99.1 ~ 100.7	0.12 ~ 0.93	0.15	0.47
Brucine Hydrate	254	2.6	5 ~ 50	$y=18934x-44941$ (0.994)	83.0 ~ 101.3	0.46 ~ 1.09	0.18	0.57

Capsaicin (Natural)	280	22.8	5 ~ 50	$y=3545x-5178$ (0.9929)	81.3 ~ 101.8	0.51 ~ 1.39	0.17	0.54
Cepharanthine	280	13	5 ~ 50	$y=75295x+2387.7$ (1)	98.8 ~ 101.5	0.13 ~ 1.28	0.23	0.7
Colchicine	254	16.3	5 ~ 50	$y=160979x-96521$ (0.9992)	95.9 ~ 102.4	0.19 ~ 1.82	0.29	0.88
Galantamine Hydrobromide	280	3.9	5 ~ 50	$y=20741x-17263$ (0.999)	92.8 ~ 100.8	0.32 ~ 5.72	0.44	1.35
Gramine	210	4.3	5 ~ 50	$y=130734x+150068$ (0.9969)	98.0 ~ 108.7	0.54 ~ 2.50	2.01	6.09
Harmine	254	8.5	5 ~ 50	$y=102398x-104942$ (0.998)	92.8 ~ 104.8	0.42 ~ 10.26	2.89	8.78
Harmol	300	5.7	5 ~ 50	$y=63249x+187.41$ (1)	99.8 ~ 100.1	0.053 ~ 0.072	0.002	0.006
Jatrorrhizine Chloride	275	13.4	5 ~ 50	$y=51517x+376.52$ (0.9999)	97.2 ~ 103.4	0.048 ~ 0.164	0.01	0.04
L-Tetrahydropalmatine	280	14	5 ~ 50	$y=7365.5x+3074$ (0.9998)	99.8 ~ 104.6	0.02 ~ 2.04	0.34	1.05
Lycorine	280	2.7	5 ~ 50	$y=9668.9x+2381.1$ (0.9999)	99.8 ~ 102.9	0.18 ~ 0.49	0.04	0.14
Matrine	280	19.6	5 ~ 50	$y=363.78x+326.05$ (0.9969)	83.9 ~ 109.3	0.99 ~ 23.13	2.1	6.38
Noscapine Hydrochloride Hydrate	254	7.9	1 ~ 50	$y=64667x+12503$ (0.9998)	86.1 ~ 102.2	0.03 ~ 2.44	0.39	1.18

Papaverine Hydrochloride	254	8.5	1 ~ 50	$y=74260x-34850$ (0.9995)	94.0 ~ 126.7	5.05 ~ 22.69	2.39	7.26
Pilocarpine Hydrochloride	230	3.1	5 ~ 50	$y=15454x+15966$ (0.9985)	98.8 ~ 115.1	0.67 ~ 13.65	1.31	3.99
Piperine	287	24.5	5 ~ 50	$y=389281x-553398$ (0.9951)	89.4 ~ 106.6	0.17 ~ 2.51	0.66	2.02
Piperlongumine	230	21.1	5 ~ 50	$y = 4952x - 2639.5$ (0.9997)	97.0 ~ 100.4	0.69 ~ 2.98	0.26	0.79
Quinidine	254	2.6	5 ~ 50	$y=33271x-30062$ (0.9991)	93.3 ~ 100.5	0.85 ~ 3.63	1.24	3.77
Reserpine	268	16.8	5 ~ 50	$y = 1374.8x + 2019.7$ (0.9919)	71.6 ~ 119.5	1.02 ~ 1.33	0.36	1.1
Rutaecarpine	250	24.3	5 ~ 50	$y = 272.26x - 1632.8$ (0.9983)	92.7 ~ 110.4	1.36 ~ 4.03	0.9	2.75
Scopolamine Hydrobromide	254	7	5 ~ 50	$y=1905.5x-664.41$ (0.9997)	94.8 ~ 101.7	0.737 ~ 3.142	0.61	1.86
Trihydrate								
Synephrine	280	2.4	5 ~ 50	$y=27424x+7625.6$ (0.9998)	99.7 ~ 101.8	0.12 ~ 0.73	0.16	0.5
Tabersonine	320	15.9	5 ~ 50	$y = 245983x + 88034$ (0.9957)	85.2 ~ 111.5	0.15 ~ 0.53	0.15	0.47

Tetrahydropalmatine	280	14.2	5 ~ 50	$y = 104858x + 13374$ (0.9999)	98.1 ~ 101.5	0.11 ~ 0.35	0.02	0.07
Tetrandrine	280	13.1	5 ~ 50	$y = 74496x + 1302.9$ (1)	99.7 ~ 100.3	0.128 ~ 0.363	0.08	0.25
Trigonelline Hydrochloride	254	2.1	5 ~ 50	$y = 98268x + 3553.1$ (1)	99.5 ~ 101.6	0.049 ~ 0.559	0.01	0.04
Vincamine	280	13.7	5 ~ 50	$y = 138995x + 3796.2$ (1)	98.4 ~ 102.4	0.167 ~ 0.341	0.06	0.21
Yohimbine Hydrochloride	280	13.1	5 ~ 50	$y = 119814x + 13995$ (1)	86.2 ~ 87.3	0.032 ~ 0.568	0.03	0.11

Amino Acids

3-(3,4- Dihydroxyphenyl)-L- alanine	282	3.9	5 ~ 50	$y=64228x-9950.2$ (0.9999)	98.3 ~ 102.0	0.14 ~ 2.34	2.35	7.14
S-Allyl-L-cysteine	210	8.4	5 ~50	$y=62434x-20174$ (0.9997)	97.1 ~ 103.0	0.19 ~ 4.95	0.26	0.81

Benzopyrans

Bergapten	254	19.1	5 ~ 50	$y=20859x+3896$ (1)	99.9 ~ 101.8	0.23 ~ 0.40	0.25	0.75
Bergenin	254	2.6	5 ~ 50	$y=17088x-9963.3$ (0.9994)	96.0 ~ 100.6	0.30 ~5.95	0.74	2.24

Cromolyn sodium salt	240	2	5 ~ 50	$y=14963x+3717.1$ (0.9998)	95.1 ~ 103.5	0.05 ~ 1.87	0.43	1.31
Griseofulvin	280	19.2	1 ~ 50	$y=37724x-8061.2$ (0.9993)	100.8 ~ 120.3	0.08 ~ 0.30	0.04	0.13
Hematoxylin Hydrate	380	2.7	1 ~ 50	$y=6799.9x-13959$ (0.9911)	72.1 ~ 233.9	0.57 ~ 5.64	0.76	2.3
Khellin	254	14.4	5 ~ 50	$y=99560x-16909$ (1)	98.1 ~ 100.2	0.11 ~ 0.39	0.05	0.16
Mangiferin	280	11	5 ~ 50	$y = 239084x - 73456$ (0.9996)	96.5 ~ 102.3	0.81 ~ 3.84	1.16	3.52
Trioxsalen	290	3.9	5 ~ 50	$y = 407391x + 154267$ (0.9998)	99.7 ~ 102.3	0.07 ~ 0.85	0.15	0.48
Xanthotoxin	300	20.1	5 ~ 50	$y = 376890x - 152040$ (0.9997)	97.3 ~ 100.5	0.14 ~ 0.49	0.02	0.08

Cinnamic acids and derivatives

(E)-3-(4-

Chlorophenyl)acrylic	280	18.3	1 ~ 50	$y=613.19-973.43$ (0.9939)	76.7 ~ 187.3	0.26 ~ 23.30	4.41	13.3
----------------------	-----	------	--------	-------------------------------	--------------	--------------	------	------

Acid

(E)-Cinnamyl Alcohol	254	14.6	1 ~ 50	$y=52799x-1441.8$ (1)	99.1 ~ 101.8	0.08 ~ 0.30	0.03	0.1
----------------------	-----	------	--------	--------------------------	--------------	-------------	------	-----

3,5-Dimethoxy-4-
hydroxycinnamic Acid

320	9.9	1 ~ 50	$y=22361x-7213.5$ (0.9997)	95.8 ~ 124.3	0.095 ~ 1.017	0.02	0.07
-----	-----	--------	-------------------------------	--------------	------------------	------	------

trans-Cinnamic Acid	280	15.1	1 ~ 50	$y = 56292x - 10244$ (1)	99.0 ~ 103.7	0.09 ~ 0.48	0.04	0.13
trans-m-Coumaric Acid	280	10.5	1 ~ 50	$y = 94314x - 27457$ (1)	94.0 ~ 100.1	0.15 ~ 19.8	0.2	0.62
trans-p-Coumaric Acid	320	9.4	1 ~ 50	$y = 52041x - 8571.8$ (1)	99.0 ~ 101.5	0.12 ~ 0.48	0.04	0.14

Flavonoids

(+)-Taxifolin	280	13.9	5 ~ 50	$y = 47657x - 6096.2$ (1)	95.7 ~ 100.6	0.01 ~ 0.10	0.02	0.08
4',6,7-Trihydroxyisoflavone	230	15.4	5 ~ 50	$y = 389332x + 194974$ (0.9989)	99.5 ~ 109.9	0.08 ~ 1.09	0.02	0.06
Icariin	275	17.4	5 ~ 50	$y = 23369x + 1453$ (1)	99.2 ~ 100.8	0.077 ~ 0.870	0.06	0.21
Phenethyl Caffeate	330	23.1	5 ~ 50	$y = 4054.4x - 2920.8$ (0.9993)	94.0 ~ 100.5	0.33 ~ 0.72	0.14	0.44
Rotenone	200	23	5 ~ 50	$y = 92169x + 13160$ (0.9999)	98.1 ~ 102.6	0.24 ~ 1.37	0.10	0.31
Wogonin	280	22.5	5 ~ 50	$y = 34267x - 8221.4$ (0.9986)	93.4 ~ 105.1	0.03 ~ 0.18	0.04	0.14
Wogonoside	280	18.5	5 ~ 50	$y = 44218x + 19600$ (0.999)	93.4 ~ 105.3	0.54 ~ 3.75	0.31	0.93

Ginsenoside

20(R)-Ginsenoside Rg2		41.2		$y=59148+13539$ (0.9992)	94.8 ~ 105.1	0.08 ~ 0.64	0.08	0.23
20(R)-Ginsenoside Rh1		42.2		$y=66282x+15708$ (0.999)	95.6 ~ 105.4	0.05 ~ 0.54	0.15	0.45
20(S)-Ginsenoside Rg3		58.0		$y=36886x-44044$ (0.9981)	91.6 ~ 101.0	0.19 ~ 0.56	0.09	0.27
20-O-Glucoginsenoside Rf		21.9		$y=42193x+5952.7$ (0.9998)	94.3 ~ 102.3	0.26 ~ 0.48	0.18	0.54
Compound K		69.1		$y=49076x-100808$ (0.9952)	85.7 ~ 101.4	0.23 ~ 0.82	0.10	0.29
Ginsenoside F1	203	44.2	5 ~ 50	$y=56825x-33465$ (0.9978)	93.0 ~ 115.0	0.08 ~ 0.76	0.11	0.34
Ginsenoside F2		54.9		$y=42638x-60742$ (0.9974)	91.3 ~ 101.2	0.40 ~ 1.22	2.67	8.08
Ginsenoside F3		40.1		$y=54968x+22624$ (0.9989)	96.1 ~ 105.8	0.14 ~ 1.35	0.17	0.51
Ginsenoside F4		39.4		$y=50400x+12261$ (0.9995)	95.0 ~ 106.4	0.36 ~ 0.74	0.10	0.31
Ginsenoside F5		39.9		$y=25934x-18704$ (0.999)	90.6 ~ 101.9	0.24 ~ 1.07	0.18	0.56
Ginsenoside Rb1		38.8		$y=31141x-14400$ (0.9994)	93.6 ~ 102.7	0.40 ~ 1.97	0.18	0.55
Ginsenoside Rb2		40.9		$y=32031x-29899$ (0.9983)	87.0 ~ 102.1	0.06 ~ 0.24	0.04	0.12

Ginsenoside Rb3	41.5	$y=34866x-31079$ (0.999)	93.3 ~ 100.6	0.04 ~ 1.43	0.86	2.59
Ginsenoside Rc	39.9	$y=31446x-17037$ (0.9994)	92.0 ~ 101.3	0.09 ~ 1.06	0.16	0.47
Ginsenoside Rd	44.0	$y=32833x-15898$ (0.9997)	92.2 ~ 100.1	0.11 ~ 1.06	0.15	0.46
Ginsenoside Re	25.3	$y=43001x+7356.6$ (0.9999)	99.8 ~ 101.4	0.11 ~ 0.82	0.13	0.40
Ginsenoside Rf	37.7	$y=51708x-3626$ (0.9999)	97.4 ~ 101.3	0.13 ~ 0.85	0.19	0.59
Ginsenoside Rg1	25.4	$y=41277x+43762$ (0.9966)	91.3 ~ 137.5	0.16 ~ 1.25	0.07	0.20
Ginsenoside Rg2	40.7	$y=52743x+12414$ (0.9989)	93.5 ~ 105.5	0.063 ~ 0.997	0.15	0.46
Ginsenoside Rg4	54.0	$y=76010x-83359$ (0.9983)	88.3 ~ 100.9	0.14 ~ 0.38	0.08	0.25
Ginsenoside Rg5	69.6	$y=93604x-254023$ (0.9895)	85.6 ~ 102.5	0.86 ~ 2.35	0.23	0.70
Ginsenoside Rh1	41.3	$y=66619x-2941.3$ (0.9999)	95.6 ~ 100.9	0.22 ~ 0.56	0.14	0.41
Ginsenoside Rh2	71.3	$y=22211x+38945$ (0.9685)	32.8 ~ 135.7	2.18 ~ 10.07	0.31	0.93
Ginsenoside Rk3	55.9	$y=118997x+9734.7$ (0.9999)	94.7 ~ 101.7	0.04 ~ 0.67	0.02	0.07

Notoginsenoside Fe		48.8		$y=42283x-39700$ (0.9987)	95.0 ~ 100.9	0.18 ~ 0.71	0.06	0.18
Notoginsenoside Ft1		56.1		$y=37337x-59684$ (0.9959)	90.7 ~ 101.7	0.34 ~ 0.78	0.16	0.48
Notoginsenoside R1		25.5		$y=17214x-1954.6$ (1)	96.7 ~ 100.5	0.64 ~ 2.11	0.19	0.56
Notoginsenoside R2		39.1		$y=47064x+650.89$ (1)	96.5 ~ 100.9	0.32 ~ 1.68	0.10	0.29
Protopanaxatriol		62.0		$y=73353x-11370$ (0.9996)	94.1 ~ 102.4	0.33 ~ 0.58	0.19	0.58
Vina-ginsenoside R4		34.0		$y=41705x+2059.3$ (1)	99.1 ~ 101.2	0.11 ~ 0.71	0.08	0.24

Glycosides

Gypenoside A	203	46.9	5 ~ 50	$y=81770x-48460$ (0.99850)	94.4 ~ 110.4	0.20 ~ 1.36	0.06	0.18
Gypenoside L	203	54.9	5 ~ 50	$y=44031x-87880$ (0.9955)	86.7 ~ 101.3	0.15 ~ 0.50	0.10	0.29
Gypenoside XLIX	203	39.7	5 ~ 50	$y=40602x-9602.6$ (0.9994)	94.1 ~ 103.6	0.22 ~ 0.51	0.02	0.07
Gypenoside XVII	203	46.5	5 ~ 50	$y=39536x-26176$ (0.9985)	87.3 ~ 103.2	0.08 ~ 1.08	0.10	0.29
4-Formylphenyl β -D- Allopyranoside	280	3.6	5 ~ 50	$y=41541x-39695$ (0.9976)	92.2 ~ 101.2	0.28 ~ 3.93	0.23	0.71
Amygdalin	210	2.3	1 ~ 50	$y=4581.1x+2944.5$ (0.9996)	99.7 ~ 141.7	1.56 ~ 3.46	0.76	2.31

Arbutin	190	3.3	5 ~ 50	$y=12707x+22426$ (0.9909)	80.0 ~ 113.5	0.79 ~ 3.92	1.31	3.96
Baicalin	254	22.4	5 ~ 50	$y=21346x-653.88$ (0.9999)	97.8 ~ 100.9	0.18 ~ 0.41	0.04	0.14
Digoxin	232	18.1	5 ~ 50	$y = 44092x + 40276$ (0.9976)	90.0 ~ 106.9	0.62 ~ 4.45	0.73	2.22
Hesperidin	210	10.5	5 ~ 50	$y=16267x-3260.4$ (0.9909)	83.3 ~ 121.8	4.09 ~ 8.87	0.89	2.71
Indican	280	10.3	5 ~ 50	$y=28776x-792.43$ (1)	97.8 ~ 100.7	0.02 ~ 0.30	0.02	0.06
Lanatoside C	230	17.6	5 ~ 50	$y = 36659x + 27072$ (0.9993)	99.4 ~ 104.6	0.47 ~ 13.74	0.99	3.02
Piceid	320	8.9	5 ~ 50	$y=32159x-15620$ (0.9981)	84.6 ~ 110.2	4.83 ~ 20.34	2.31	7.01
Rebaudioside A	210	5	1 ~ 50	$y=2205x-957.25$ (0.9991)	95.1 ~ 128.8	0.69 ~ 4.52	3.55	10.7
Rhaponticin	254	14.3	5 ~ 50	$y = 207819x - 225785$ (0.9944)	88.8 ~ 123.3	0.002 ~ 0.107	0.001	0.003
Salicin	200	10.6	1 ~ 50	$y=71318x+23736$ (0.9993)	72.2 ~ 104.8	4.46 ~ 8.01	0.68	2.07
Sinigrin	230	3.3	5 ~ 50	$y = 71010x + 97704$ (0.9979)	99.1 ~ 109.6	0.004 ~ 1.153	0.18	0.54
Stevioside	210	5.3	1 ~ 50	$y=1934.4x-167.48$ (0.9997)	96.7 ~ 116.5	0.51 ~ 8.92	0.24	0.71

Swertiamarin	240	10.1	5 ~ 50	$y = 137907x - 9963.8$ (1)	99.2 ~ 100.03	0.094 ~ 0.291	0.04	0.11
Ketones								
4'-Hydroxy-3'-methoxyacetophenone	280	9.5	1 ~ 50	$y = 53392x + 8669.3$ (0.9999)	89.2 ~ 101.7	0.08 ~ 0.49	0.07	0.21
Cycloheximide	250	16.8	5 ~ 50	$y = 2302.1x - 1442.9$ (0.9995)	94.6 ~ 100.4	2.40 ~ 15.33	3.26	9.89
Phenolic compounds								
(+)-Usnic Acid	280	31.5	1 ~ 50	$y = 43157x - 2153.2$ (1)	100.1 ~ 123.9	0.18 ~ 2.04	0.11	0.32
2-(2-Hydroxyethyl)phenol	200	8.4	5 ~ 50	$y = 129943x + 94001$ (0.9988)	96.5 ~ 111.5	0.31 ~ 2.22	0.20	0.61
2-(4-Hydroxyphenyl)ethanol	280	6.1	5 ~ 50	$y = 8852.4x + 3908.1$ (0.9986)	86.1 ~ 105.6	0.11 ~ 0.74	0.02	0.06
Bisdemethoxycurcumin	420	20.8	1 ~ 50	$y = 151318x - 27892$ (0.9999)	98.2 ~ 109.8	0.31 ~ 0.68	0.08	0.26
Curcumin (Natural)	420	21.8	1 ~ 50	$y = 102626x - 18398$ (0.9998)	97.9 ~ 111.0	0.06 ~ 0.12	0.02	0.07
Curcumin (Synthetic)	254	22.9	1 ~ 50	$y = 25887x + 4504.5$ (0.9999)	82.1 ~ 102.6	0.17 ~ 3.24	0.18	0.56
Ellagic acid	360	3.1	5 ~ 50	$y = 129476x - 108739$ (0.9989)	90.3 ~ 100.9	5.31 ~ 7.00	2.35	7.14
Ellagic Acid Dihydrate	254	1.97	5 ~ 50	$y = 6626x + 27742$ (0.9812)	97.8 ~ 156.3	0.35 ~ 16.81	3.30	10.00

Magnolol	280	26.6	5 ~ 50	$y=10015x-37951$ (0.9814)	69.7 ~ 102.9	0.006 ~ 0.120	0.008	0.02
Nordihydroguaiaretic Acid	200	17.7	1 ~ 50	$y=143788x+123737$ (0.9921)	87.6 ~ 384.8	6.60 ~ 18.18	2.31	7.01
Punicalagin	378	5.5	5 ~ 50	$y=12404x+855.73$ (0.999)	93.9 ~ 104.4	1.97 ~ 5.51	0.23	0.71
Resveratrol	320	12.1	5 ~ 50	$y=101213x+8963.2$ (1)	99.4 ~ 101.6	0.04 ~ 0.13	0.03	0.09
Rhododendrol	200	9.9	5 ~ 50	$y=90654x+91083$ (0.9984)	99.0 ~ 105.4	0.35 ~ 10.13	0.77	2.34
Rosmarinic acid	320	10.9	1 ~ 50	$y=34142x-17280$ (0.9993)	69.3 ~ 103.1	0.02 ~ 1.60	0.14	0.42
Sesamin	280	25.8	5 ~ 50	$y = 107639x + 13237$ (0.9999)	98.6 ~ 101.9	0.01 ~ 0.63	0.12	0.37
Sesamol	298	10.1	1 ~ 50	$y=27276x+4581.8$ (0.9999)	95.6 ~ 101.2	0.85 ~ 4.15	0.36	1.12
Polypeptides								
Bacitracin	250	14	5 ~ 50	$y = 8334.1x - 1933$ (0.9999)	97.0 ~ 100.5	0.18 ~ 0.84	0.08	0.25
Gramicidin (Mixture of A, B, C, and D)	280	29		$y=10304x+21400$ (0.994)	98.2 ~ 115.4	0.98 ~ 7.02	1.66	5.04
Polysaccharides								
Xylan from Corn Core	ELSD	14	50 ~ 500	$y=2.3365x-8.4042$ (0.9915)	97.7 ~ 102.3	0.07 ~ 1.69	0.48	1.46
ι-Carrageenan	ELSD	7.3		$y=1.3531x-4.1836$ (0.965)	95.2 ~ 104.8	0.37 ~ 3.66	1.26	3.82

κ -Carrageenan	ELSD	7.4		$y=2.3353x-9.917$ (0.9956)	98.8 ~ 100.8	0.07 ~ 2.42	1.35	4.10
λ -Carrageenan (Low-viscosity)	ELSD	7.4		$y=1.0663x-3.1605$ (0.9526)	94.3 ~ 103.4	0.33 ~ 2.37	0.27	0.84
Quinones								
Carminic Acid (Natural dye)	280	12.9	1 ~ 50	$y=84750x-14565$ (0.9992)	93.9 ~ 167.1	2.91 ~ 24.31	0.51	1.57
Chrysazin	254	3.6	5 ~ 50	$y=24718x-11487$ (0.9996)	96.4 ~ 100.6	0.17 ~ 2.19	0.16	0.51
LDN-22684	254,280	25.2	5 ~ 50	$y = 444843x - 363917$ (0.9983)	93.8 ~ 104.2	0.09 ~ 1.13	0.15	0.48
Mollugin	254	33.4	1 ~ 50	$y = 77492x + 134030$ (0.9922)	60.4 ~ 116.4	3.47 ~ 17.97	3.74	11.35
Purpurin	254	19.8	5 ~ 50	$y=56476x+110216$ (0.9911)	82.7 ~ 129.4	0.03 ~ 0.99	0.04	0.14
Steroids								
Cholecalciferol	320	1		$y = 20983x + 24959$ (0.996)	90.9 ~ 109.6	0.39 ~ 6.74	0.44	1.33
Ergosterol	280	14.7	5 ~ 50	$y=110781x-59317$ (0.9996)	97.1 ~ 100.5	0.28 ~ 0.67	0.07	0.23
Triamcinolone	254	15.5		$y = 188062x - 65941$ (0.9997)	97.2 ~ 100.5	0.04 ~ 0.28	0.04	0.12
Terpenoids								
(+)-Nootkatone	240	28.8	5 ~ 50	$y = 430540x - 52680$ (0.9996)	94.6 ~ 103.1	0.007 ~ 0.380	0.11	0.33
Abietic Acid	254	35.1	5 ~ 50	$y=18535x-941.35$	97.3 ~ 104.6	0.08 ~ 0.40	0.05	0.17

				(0.9998)				
Andrographolide	254	13.8	5 ~ 50	$y=124.47x+148.97$ (0.9982)	99.3 ~ 110.7	2.27 ~ 8.85	1.35	4.11
Betulin	210	14.2	5 ~ 50	$y=9753.4x-70.669$ (0.9998)	100.4 ~ 122.6	4.58 ~ 6.57	0.52	1.58
Glycyrrhetic Acid	254	29.5	1 ~ 50	$y=20794x-1627.8$ (1)	99.0 ~ 100.0	0.10 ~ 1.19	0.08	0.26
Glycyrrhizin	254	17.6	5 ~ 50	$y=9018.8x-11466$ (0.997)	92.2 ~ 101.4	0.61 ~ 1.51	0.23	0.71
Hecogenin	194	6.7	5 ~ 50	$y=2043.7x+74.016$ (0.9994)	96.5 ~ 106.8	1.91 ~ 21.21	0.84	2.56
Hinokitiol	270	3.1	10 ~ 100	$y=43151x-206469$ (0.9927)	77.8 ~ 103.8	1.16 ~ 13.21	3.55	10.7
Limonin	210	21.5	5 ~ 50	$y = 5180.9x + 4449.6$ (0.9982)	93.7 ~ 105.8	1.92 ~ 2.48	0.95	2.89
Oleuropein	235	15.5	5 ~ 50	$y = 111996x - 33514$ (0.9995)	98.1 ~ 105.2	0.11 ~ 0.53	0.07	0.22
Oridonine	254	16.7	5 ~ 50	$y = 87483x + 20853$ (0.9998)	97.1 ~ 102.2	0.05 ~ 0.30	0.02	0.08
Paeoniflorin	230	12.4	5 ~ 50	$y = 97907x + 64255$ (0.999)	98.0 ~ 104.7	0.14 ~ 1.75	0.28	0.87
Parthenolide	230	13.3	5 ~ 50	$y = 15442x + 12536$ (0.9983)	94.3 ~ 105.9	0.20 ~ 3.90	0.16	0.5
Santonin	254	20	5 ~ 50	$y = 274556x - 89063$ (0.9997)	97.3 ~ 100.4	0.006 ~ 0.189	0.05	0.15
Sclareol	230	2.9	5 ~ 50	$y=11548x+11709$ (0.9987)	99.5 ~ 117.1	3.93 ~ 31.60	2.49	7.55

Tanshinone IIA	280	30.7	5 ~ 50	$y = 276.31x + 180.04$ (0.9992)	98.4 ~ 103.8	1.39 ~ 11.64	1.44	4.37
Ursolic Acid	200	15.7	5 ~ 50	$y = 141262x + 32086$ (0.9997)	97.5 ~ 102.7	0.01 ~ 1.25	0.21	0.63
Diazolidines								
Allantoin	190	2.1	5 ~ 50	$y = 9769.5x - 7220.6$ (0.9994)	92.1 ~ 100.4	0.21 ~ 0.78	0.21	0.66
Phenazines								
Phenazine methosulfate	254	4.3	5 ~ 50	$y = 963832x + 1656100$ (1)	91.9 ~ 113.0	0.09 ~ 1.69	0.45	1.37
Pyrazolones								
3-Methyl-1-phenyl-2-pyrazoline-5-one	250	14.7	5 ~ 50	$y = 366750x - 27062$ (0.9999)	95.0 ~ 100.9	0.29 ~ 1.54	0.07	0.23