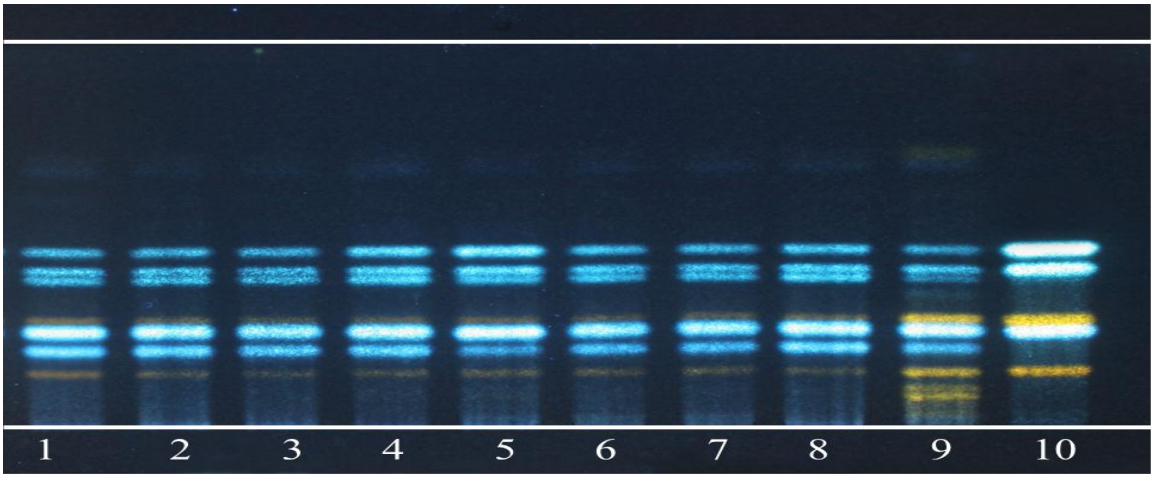
Lonicera japonica Flower — Identification

Thin-Layer Chromatography (Identification)

After treated by Derivatization reagents A and B, under UV light at 366 nm



Typical HPTLC Chromatograms

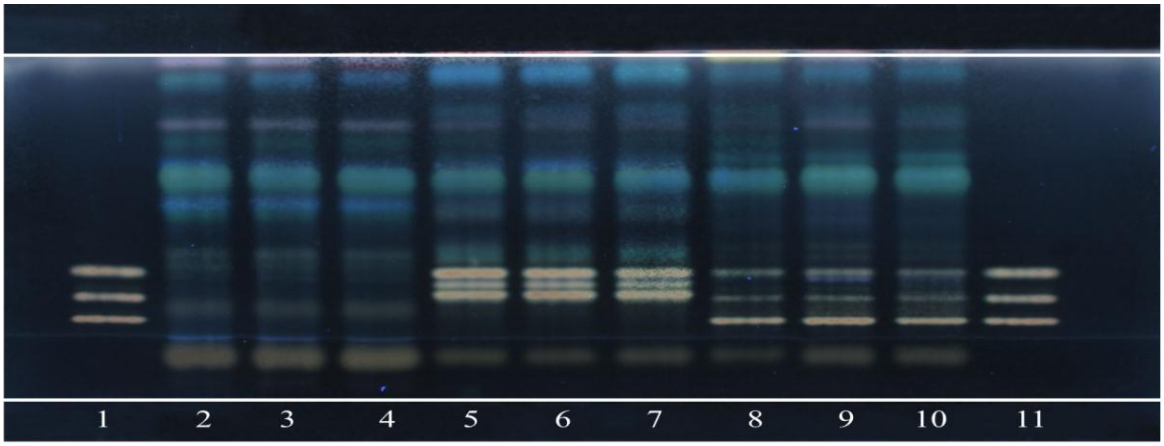
These chromatograms are supplied for information only

Track assignment: **1~9** *Lonicera japonica* Flower Dry Extract Samples; **10** Mixture reference standards: rutin, chlorogenic acid, luteolin-7-*O*-glucoside, 4,5-di-*O*-caffeoylquinic acid and 3,5,-di-*O*-caffeoylquinic acid (increasing *Rf* order)

Sample solutions:	according to the monograph of *Standard solution B*
Standard solution:	in methanol
Plate:	HPTLC, NanoDURASIL-20 G
Saturation Time:	saturated chamber
Application volume:	5 µL, as 10-mm bands
Relative Humidity:	about 33%
Developing solvent system:	n-butyl acetate, formic acid, and water (7:5:5), upper layer
Developing distance:	8 cm
Derivatization reagent A:	10 mg/mL of 2-aminoethyl diphenylborinate in methanol
Derivatization reagent B:	50 mg/mL of polyethylene glycol 4000 in alcohol

Thin-Layer Chromatography (Limit of Triterpenoid Saponins)

After treated by Derivatization reagent, under UV light at 366 nm



Typical HPTLC Chromatograms

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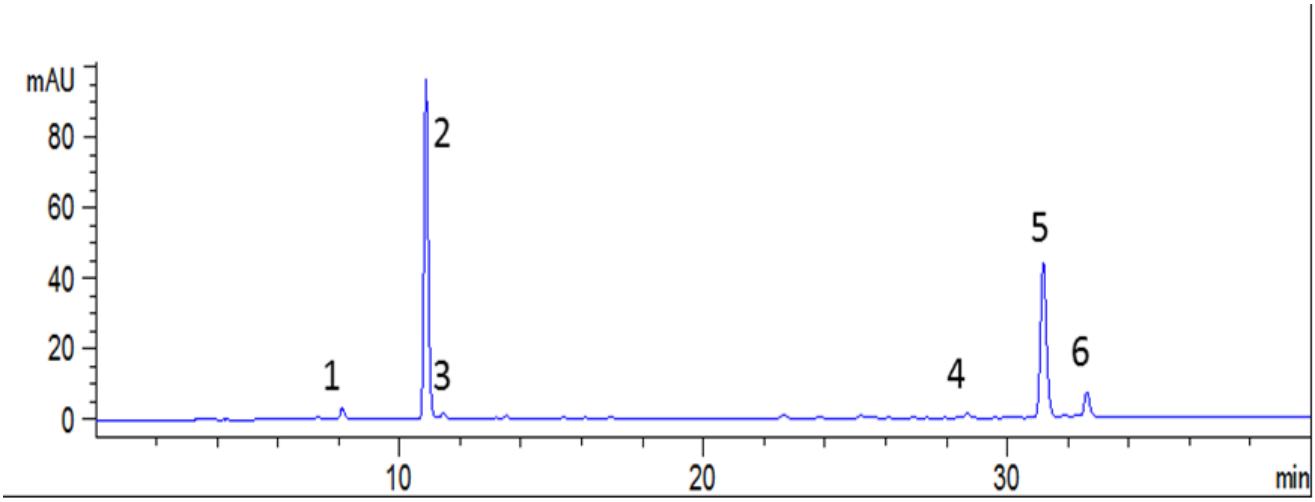
Track assignment: **1** and **11** Mixture reference standards: macranthoidin B macranthoidin A and dipsacoside B (increasing *Rf* order); **2~4** *Lonicera japonica* Flower; **5~7** *Lonicera fulvotomentosa* Flower; **8~10** *Lonicera macranthoides* Flower

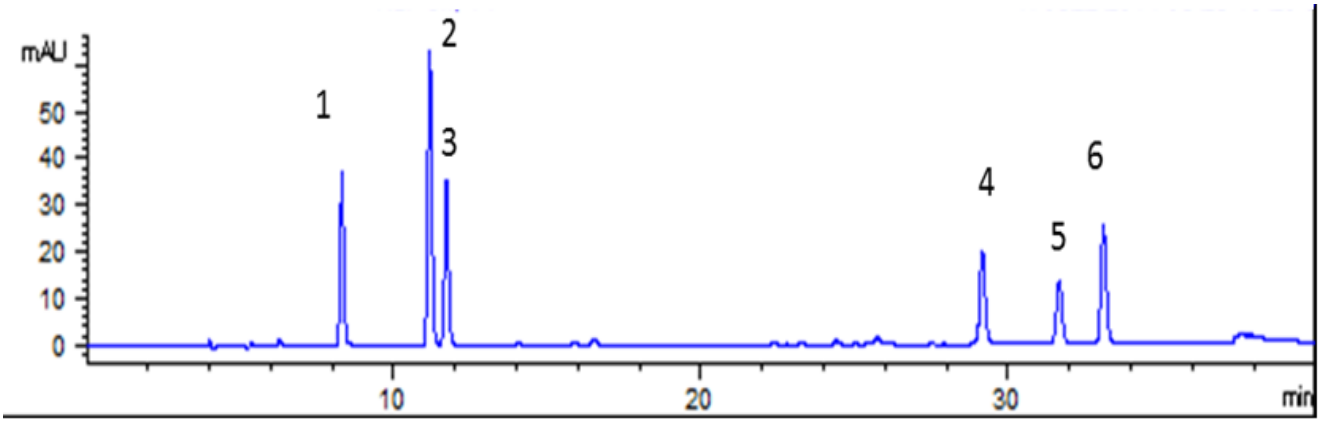
Sample solutions:	according to the monograph of *Sample solution*
Standard solutions:	in methanol
Plate:	HPTLC, Silica G Merck
Saturation Time:	saturated chamber
Application volume:	3 µL as 10-mm bands
Relative Humidity:	about 33%
Developing solvent system:	*n*-butanol, formic acid and water (4:1:5), upper layer
Developing distance:	8 cm
Derivatization reagent:	10% sulphuric acid in ethanol

HPLC (Caffeoylquinic acids)

Plant



Extract



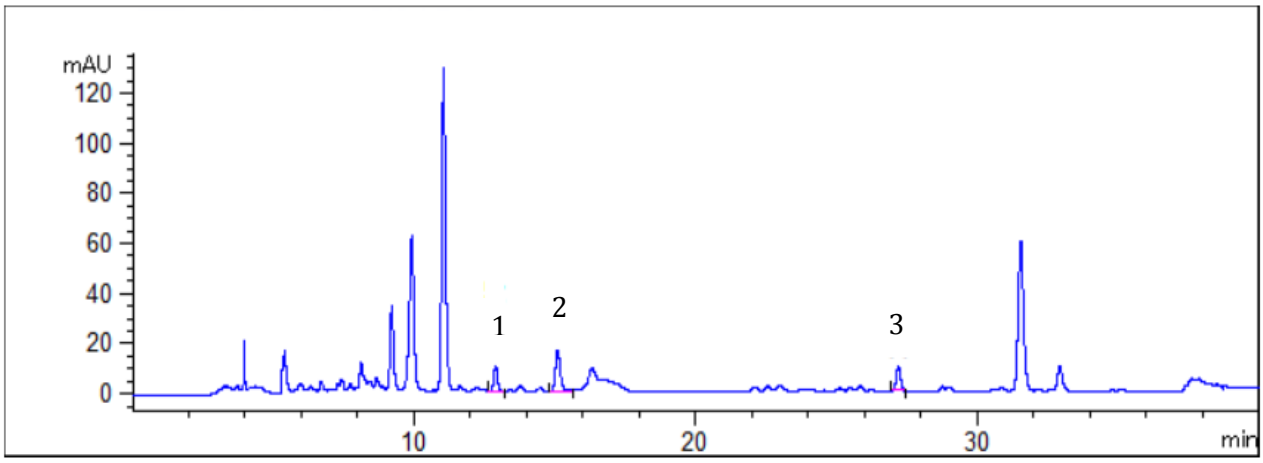
*1) neochlorogenic acid; **2**) chlorogenic acid; **3**) cryptochlorogenic acid; **4**) 3,4-di-*O*-caffeoylquinic acid; **5**) 3,5-di-*O*-caffeoylquinic acid; **6**) 4,5-di-*O*-caffeoylquinic acid

Representative chromatogram of *Content of caffeoylquinic acids* in *Lonicera japonica* Flower

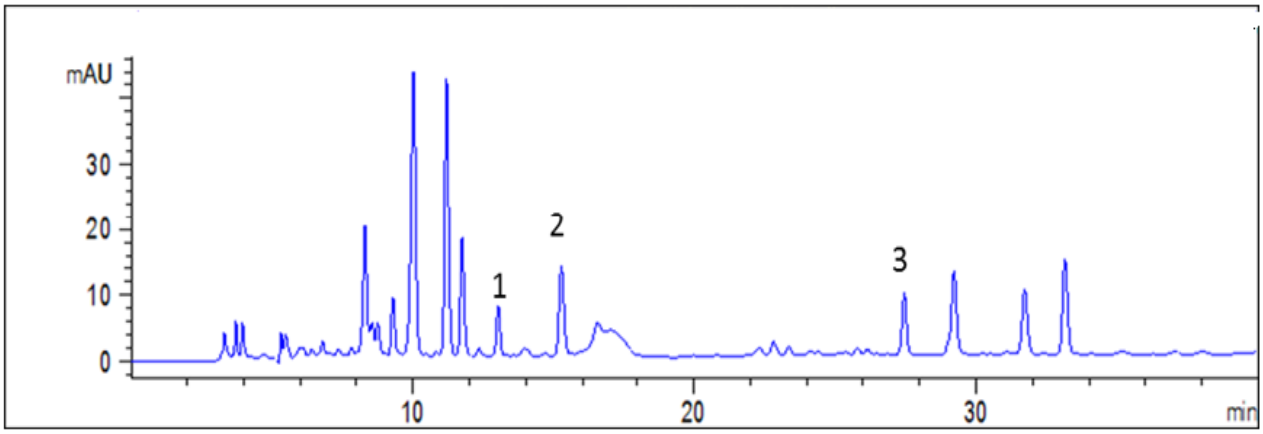
These chromatograms are supplied for information only

HPLC (Iridoids)

Plant



Extract



*__1__) sweroside；__2__) secoxyloganin；__3__) centauroside

Representative chromatogram of *Content of Iridoids* in *Lonicera japonica* Flower

These chromatograms are supplied for information only

Solutions preparation: according to monograph *Sample solution* for plant, and according to monograph *Standard solution B* for extract

Detector: UV, at 327 nm for caffeoylquinic acids and at 240 nm for iridoids

Column: 4.6-mm × 25-cm; 5-µm packing *L1* (Thermo Scientific Syncronis C18)

Column temperature: 15°

Flow rate: 0.7 mL/min

Injection volume: 2 µL

Solution A: 0.1% Phosphoric acid in water

Solution B: Acetonitrile

Mobile phase: See *Table 1*

Table 1

Time (min)	Solution A (%)	Solution B (%)
0	86	14
8	81	19
14	81	19
34	69	31
35	10	90
39.5	10	90
40	86	14