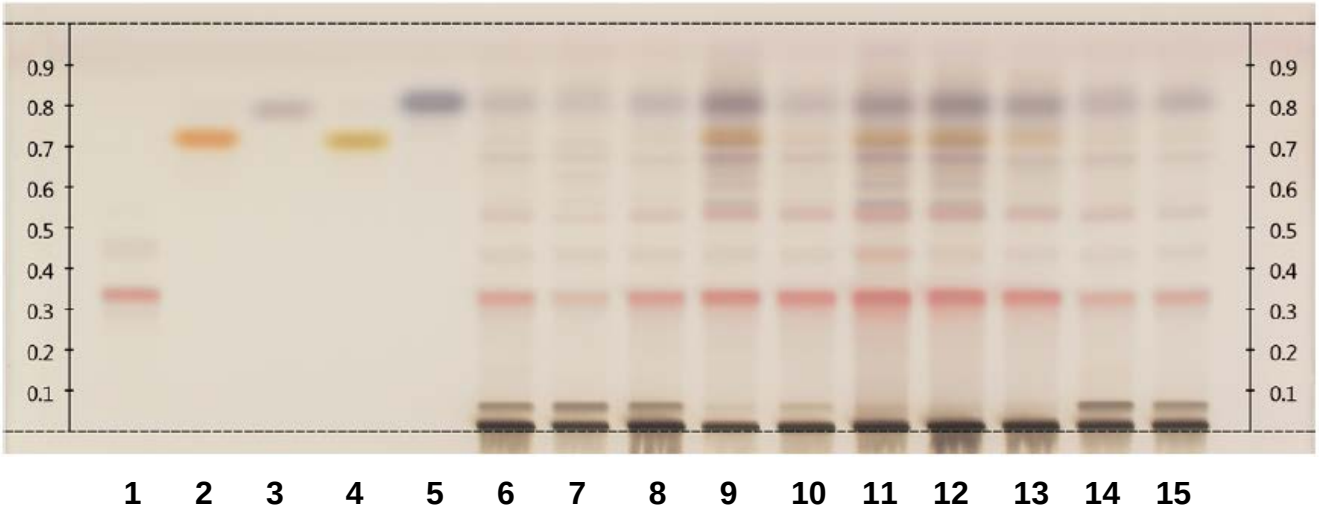
Salvia miltiorrhiza Root and Rhizome — Identification

Thin-Layer Chromatography



Typical HPTLC Chromatograms

These chromatograms are supplied for information only

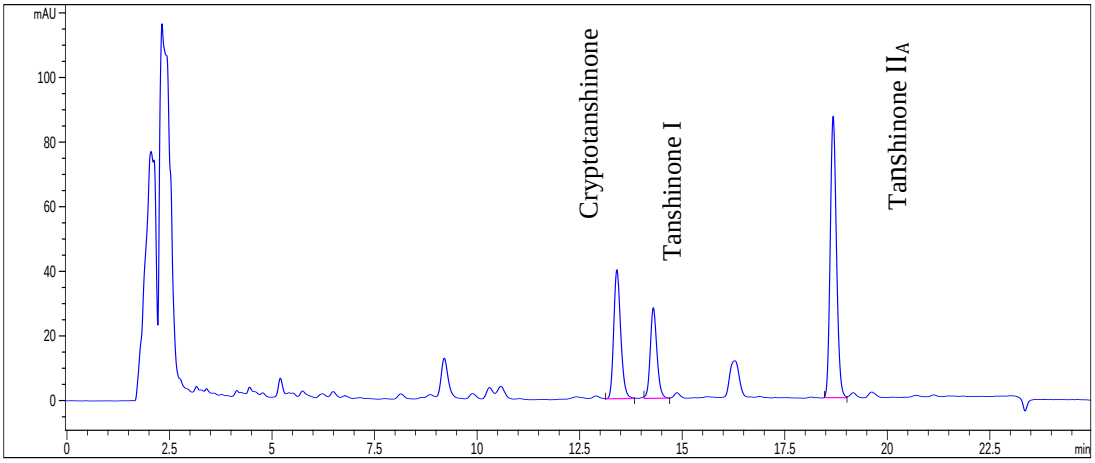
Track assignment: 1) Salvianolic acid B (1.0 mg/mL); 2) Cyprotanshinone (1.0 mg/mL); 3) Tanshinone I (1.0 mg/mL); 4) Dihydrotanshinone (1.0 mg/mL); 5) Tanshinone II_A (1.0 mg/mL); 6-15) *Salvia Miltiorrhiza* Root and Rhizoma, commercial samples

Sample solutions:	according to the monograph
Standard solutions:	in methanol
Plate:	HPTLC, Si 60 F_{254}
Saturation time:	20 minutes
Application volume:	5 µL, as 8-mm bands
Relative Humidity:	about 33%
Temperature:	25°
Developing solvent system:	toluene, dichloromethane, ethyl acetate, methanol, and formic acid (4:6:8:1:4)

Derivatization reagent: Sulfuric acid reagent – 20 mL sulfuric acid in 180 mL methanol

Detection: derivatize, dry, heat at 100° for 5 min, examine under visible light

HPLC (Tanshinones)



Representative chromatogram of *Content of Tanshinones* in *Salvia Miltiorrhiza* Root and Rhizome

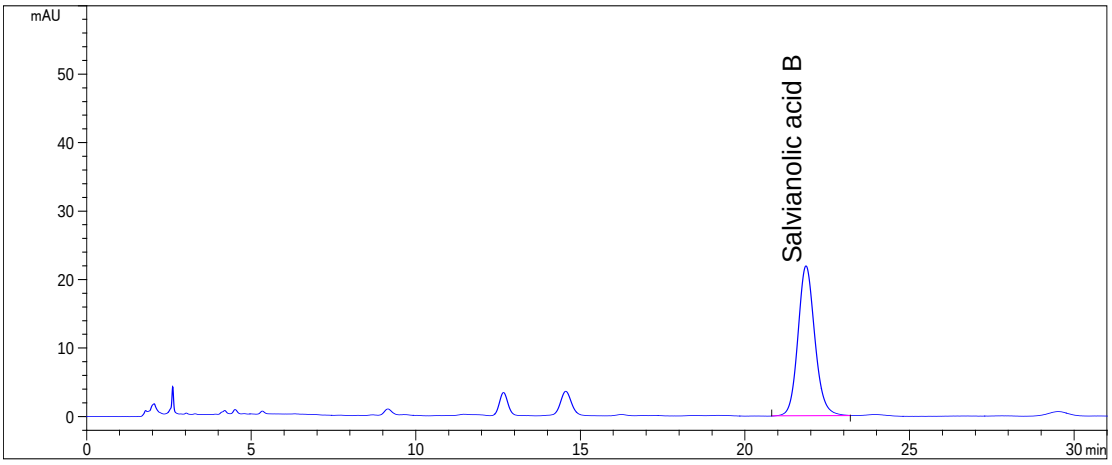
This chromatogram is supplied for information only

Solutions preparation:	according to the monograph
Detector:	UV, 270 nm
Column:	4.6-mm × 25-cm; 5-µm packing L1 (Similar to Zorbax Extend C18)
Column temperature:	25°±1
Flow rate:	1.0 mL/min
Injection volume:	10 µL
Solution A:	0.02% phosphoric acid in water
Solution B:	acetonitrile
Mobile phase:	see *Table 1*

Table 1

Time (min)	Solution A (%)	Solution B (%)
0	39	61
6	39	61
20	10	90
20.5	39	61
25	39	61

HPLC (Salvianolic acid B)



Representative chromatogram of *Content of Salvianolic acid B* in *Salvia Miltiorrhiza* Root and Rhizome

This chromatogram is supplied for information only

Detector: UV, 286 nm

Column: 4.6-mm × 25-cm; 5 µm packing L1 (similar to ZORBAX SB C_{18})

Column temperature: 25°±1

Flow rate: 1.2 mL/min

Injection volume: 10 µL

Mobile phase: 0.1% phosphoric acid in water and acetonitrile (78:22)