

# Liuying Pills (*Liuying Wan*) – 六应丸

## Sample source

Commercially available Liuying Pills

## Chemical reference substances

1. Bufogenin, 2. Cinobufagin  
(National Institute for the Control of Pharmaceutical and Biological Products, Batch number 1.803-200203, 2.718-200207)

## Preparation of test solution

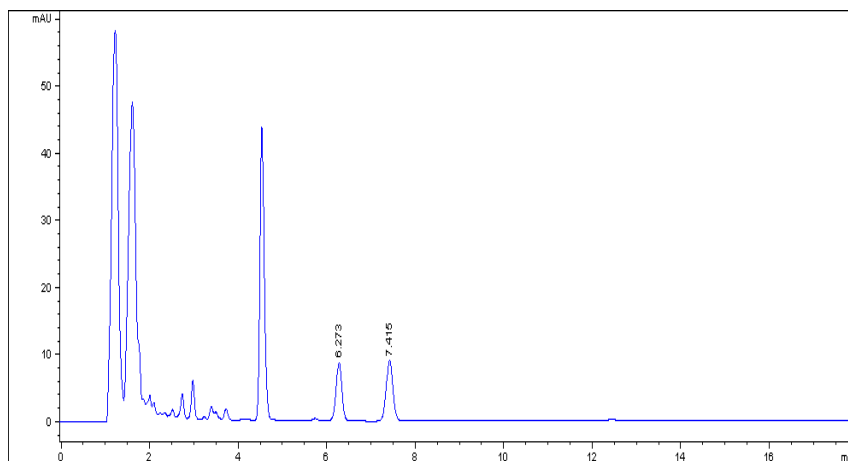
Grind a quantity of the pills to a powder, accurately weigh 0.3 g of the powder, accurately add 20 mL of methanol, heat under reflux for 1.5 hours, allow to cool. Weigh again and replenish the lost weight with methanol, mix well and filter, use the filtrate as the test solution.

## Chromatographic conditions

- Column: ZORBAX SB C18 4.6×150 mm, 5 µm (883975-902)
- Column temperature: 25 °C
- Mobile phase: acetonitrile-0.5% potassium dihydrogen phosphate (50:50)
- Detector wavelength: 296nm
- Flow rate: 1.0 mL/min
- Injection volume: 5 µL

## Chromatographic system

- Agilent 1200 Series quaternary pump with vacuum degasser
- Agilent 1200 Series high-performance autosampler
- Agilent 1200 Series thermostated column compartment
- Agilent 1200 Series diode-array detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU*s)	n	USP T <sub>r</sub>
Cinobufagin	4.227	6.273	8.65	78.1	11391	0.97
Bufogenin	5.179	7.415	9.01	95.4	11654	1.00