

## Ingredients in cough syrup

**Method** VPH0001J  
**HPLC**

**Column:** ProntoSIL 120-5 C18 ace-EPS 250 x 4 mm  
Eurosphere 100-5 C18 250 x 4 mm  
ProntoSIL 120-5-C18 SH 250 x 4 mm

**Order No.** 25DF18APSJ  
25DE181ESJ  
25DF180PSJ

**Phase:** ProntoSIL 120-5 C18  
Eurosphere 100-5 C18  
ProntoSIL 120-5-C18 SH

**Conditions:** Eluent: Water/MeOH (70:30, v/v) with 0.1% TFA (pH 1.85)  
Gradient: Isocratic  
Flow rate: 0.8 ml/min  
Temperature: 40 °C  
Volume: 5 µL

**Detection:** UV, Codeine / Pseudoephedrine  $\lambda_{\max}$  210nm  
Guaifenesin  $\lambda_{\max}$  220nm

**Sample pretreatment:** The sample preparation is very simple and only needs a dilution step. For the analysis of the cough syrup the original sample was diluted 1:25 with HPLC eluent. It is recommendable to filtrate the sample with a 0.45 µm syringe filter unit.

**Substances:** Guaifenesin, Codeine, Pseudoephedrine

**Keywords:** Cough syrup, Guaifenesin, Codeine, Pseudoephedrine

### Chromatogram:

Overlays of standard (red)  
and diluted sample (blue) on the  
ProntoSil 120-5 C18 ace-EPS phase

- 1 Codein
- 2 unknown peak
- 3 Pseudoephedrine
- 4 Guaifenesin

