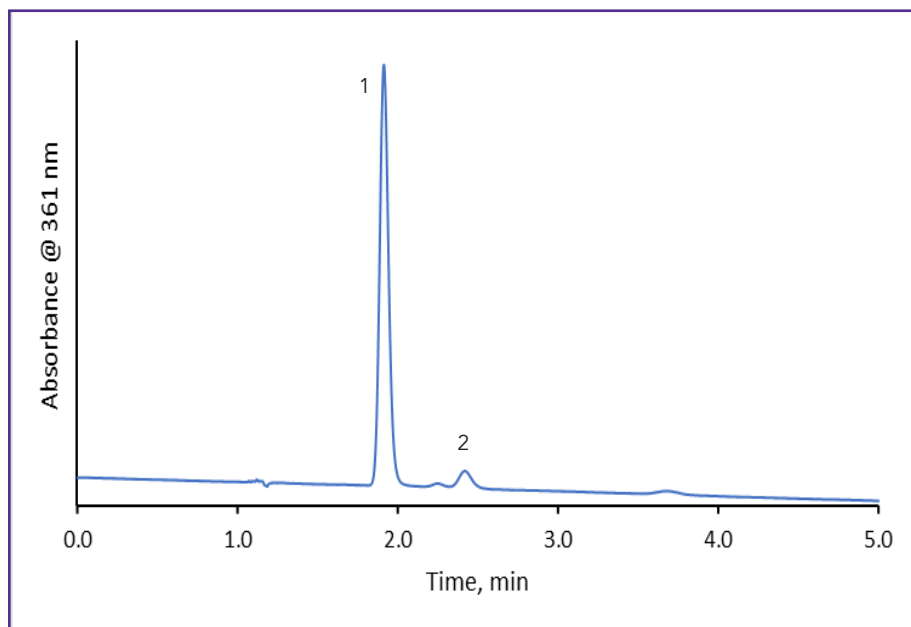




## Vitamin B12 Analysis According to Chinese Pharmacopoeia (CP) Method

258-V



### PEAK IDENTITIES

1. Cobalamin (B12)
2. Impurity

### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 5 µm, 4.6 x150 mm  
**Part Number:** 95814-702  
**Isocratic:** 26/74 MeOH/ 28 mM Na<sub>2</sub>HPO<sub>4</sub> pH: 3.5  
**Flow Rate:** 1.0 mL  
**Pressure:** 209 bar  
**Temperature:** 30 °C  
**Detection:** UV 361 nm, PDA  
**Injection Volume:** 10 µL System Suitability Solution

**Back Pressure:** 205 bar  
**Sample Solvent:** mobile phase  
**Data Rate:** 100 Hz  
**Response Time:** 0.025 sec  
**Flow Cell:** 1 µL  
**LC System:** Shimadzu Nexera X2

Cobalamin, better known as vitamin B12, is one of the eight water soluble vitamins. It is the largest and most complex vitamin. A separation of cobalamin is achieved using a HALO 90 Å C18, 5 µm column following the Chinese Pharmacopoeia method. A resolution value of 4.35 is observed, well above the specification required in the method (>2.5).

