

Analysis of Pyridoxal Phosphate Hydrate

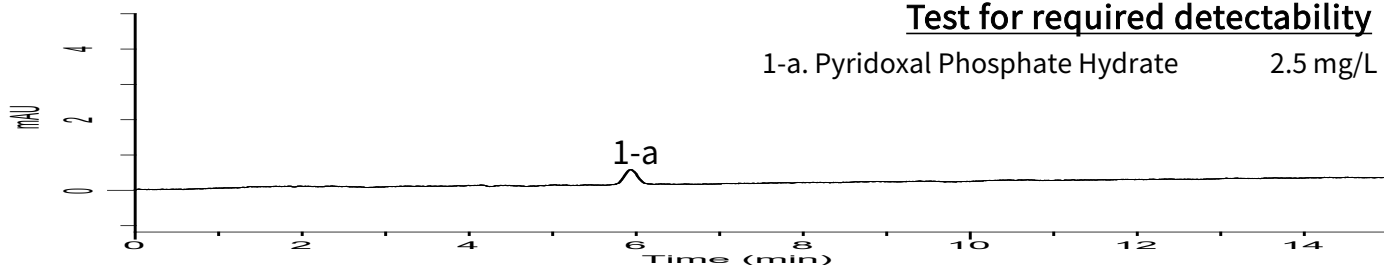
(Under the Condition of the Japanese Pharmacopoeia, (4) Related substances)

Data No. LB485-0894

Test for required detectability

1-a. Pyridoxal Phosphate Hydrate

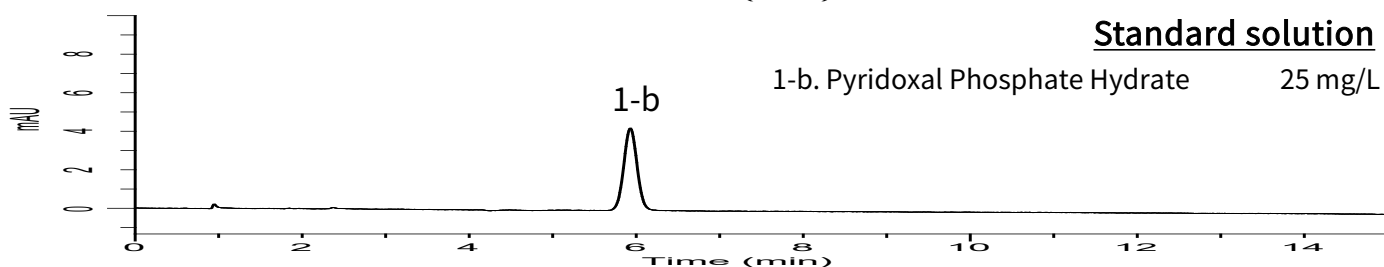
2.5 mg/L



Standard solution

1-b. Pyridoxal Phosphate Hydrate

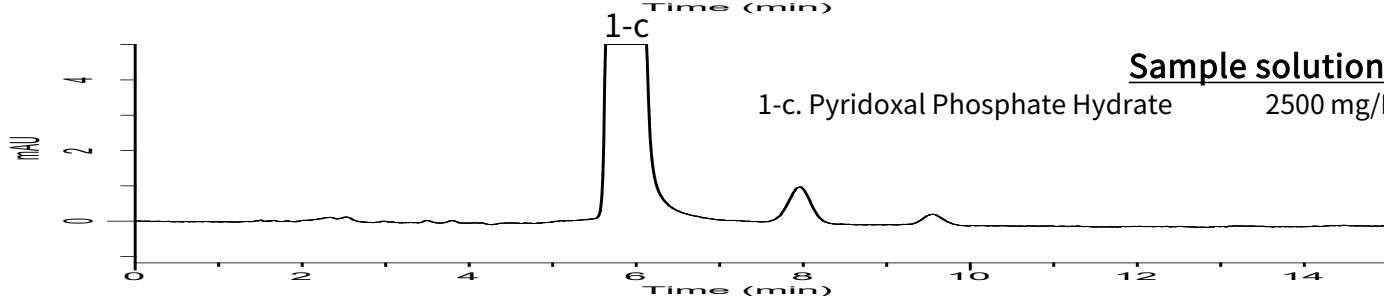
25 mg/L



Sample solution

1-c. Pyridoxal Phosphate Hydrate

2500 mg/L



Conditions

System : GL7700 HPLC system
 Column : InertSustain AQ-C18
 (5 μ m, 250 x 4.6 mm I.D.)
 Column Cat. No. : 5020-89731
 Eluent : Buffer*
 Flow Rate : 1.70 mL/min
 Col. Temp. : 30 °C
 Detection : UV 254 nm (PD7752 PDA Detector)
 Injection Vol. : 5 μ L

• Sample : Standard

*Dissolve 18.15 g of potassium dihydrogen phosphate and 28.38 g of anhydrous disodium hydrogenphosphate in water to make 5 L.

Analyte:

1. Pyridoxal Phosphate Hydrate

The peak area ratio of 1-a to 1-b (%) : (7 $\leq$) 10.1 ($\leq$ 13)

Theoretical plate number (1-b) : 6,624 ($\geq$ 3,000)

Tailing factor (n = 6) : 1.02 ($\leq$ 1.5)

RSD of the 1-b area (%) (n = 6) : 0.24 ($\leq$ 2.0)

Pressure: 13.7 MPa