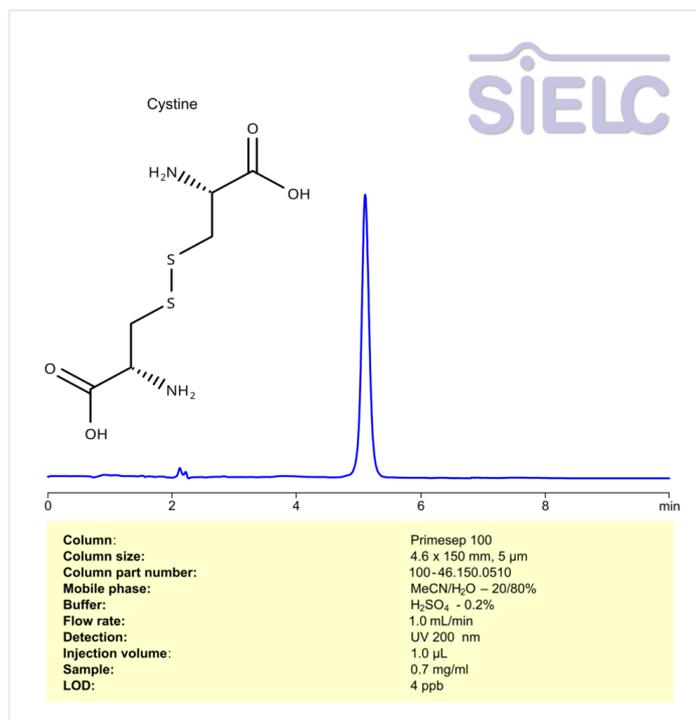


HPLC Method for Analysis of Cystine on Primesep 100 Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of Cystine

Cystine is an organic compound with the molecular formula C₆H₁₂N₂O₄S₂.

Properties: Appearance: Typically appears yellowish with a waxy, compact, and partially opaque texture.

Molecular weight: ~240.3 g/mol

Solubility: Soluble in water with HCL or NaOH.

Uses: Plays a crucial role in various biological processes due to its ability to stabilize protein structures and its role as a precursor to the antioxidant glutathione.

Cystine can be retained and analyzed using the Primesep 100 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN), and sulfuric acid. Detection is performed using UV at 200 nm.

Method Parameters

| | |
|---------------------|---|
| Column | Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended |
| Mobile Phase | MeCN – 20% |
| Buffer | H ₂ SO ₄ – 0.2% |
| Flow Rate | 1.0 mL/min |
| Detection | UV 200 nm |

Quelle: <https://sielc.com/hplc-method-for-analysis-of-cystine>