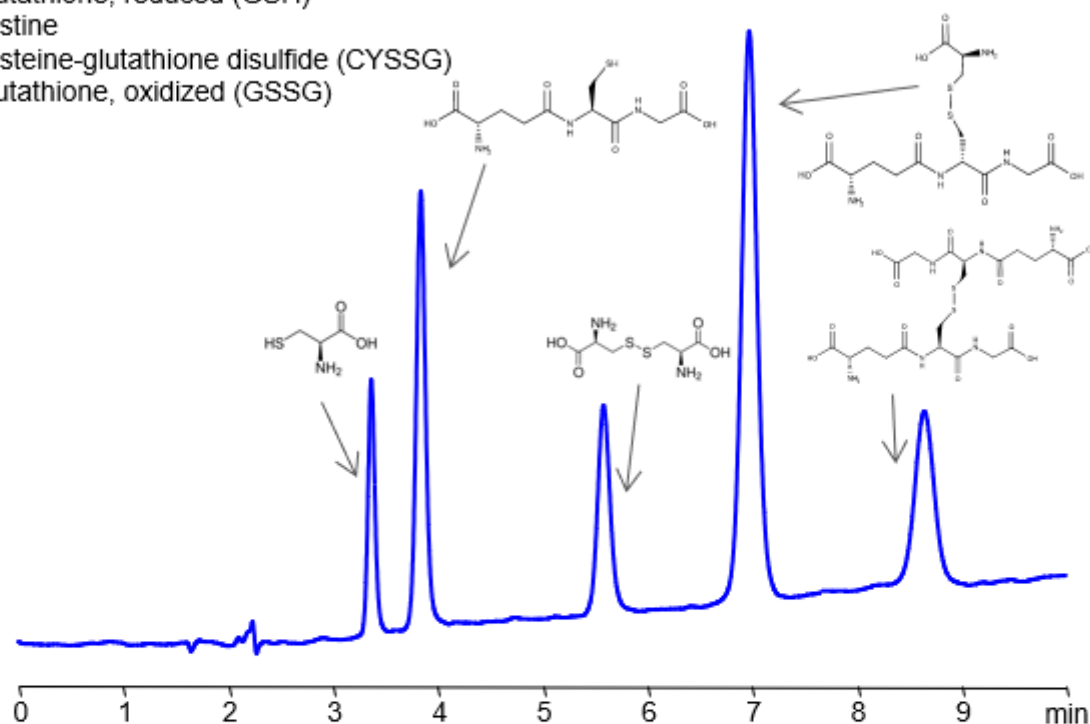


HPLC Method for Separation of Sulfur-containing Biomolecules on Primesep 100 Column

<https://sielc.com/hplc-separation-sulfur-containing-biomolecules>

Chromatogram

1. Cysteine (Cys)
2. Glutathione, reduced (GSH)
3. Cystine
4. Cysteine-glutathione disulfide (CYSSG)
5. Glutathione, oxidized (GSSG)



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN – 10 %
Buffer:	Gradient H ₂ SO ₄ – 0.2 – 0.3%, 10 min
Flow rate:	1.0 mL/min
Detection:	UV 200 nm

Description

· Separation type: Liquid Chromatography Mixed-mode

HPLC Method for Separation of Cysteine, Glutathione, reduced, Cystine, Cysteine-glutathione disulfide, Glutathione oxidized on Primesep 100 Column by SIELC Technologies

These compounds are all involved in redox reactions and cellular defenses against oxidative stress in biological systems. Here's a bit more about each of them:

Overall, these molecules play vital roles in the body's antioxidant defenses, detoxification of xenobiotics, modulation of redox-controlled signaling pathways, and regulation of cellular proliferation and apoptosis.

These compounds can be retained, separated, and analyzed using a reverse-phase Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended column. The mobile phase for this method consists of water, acetonitrile (MeCN), and Sulfuric acid, which serves as a buffer. This analytical method can be

Method Parameters

Mobile Phase	MeCN -10%
Buffer	Gradient H2SO4 0.1-0.3%, 10 min
Flow Rate	1.0 ml/min
Detection	UV 200 nm
Class of Compounds	Thiol, Amino acid
Analyzing Compounds	Cysteine, Glutathione, reduced, Cystine, Cysteine-glutathione disulfide, Glutathione oxidized

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](http://hplc-shop.de)