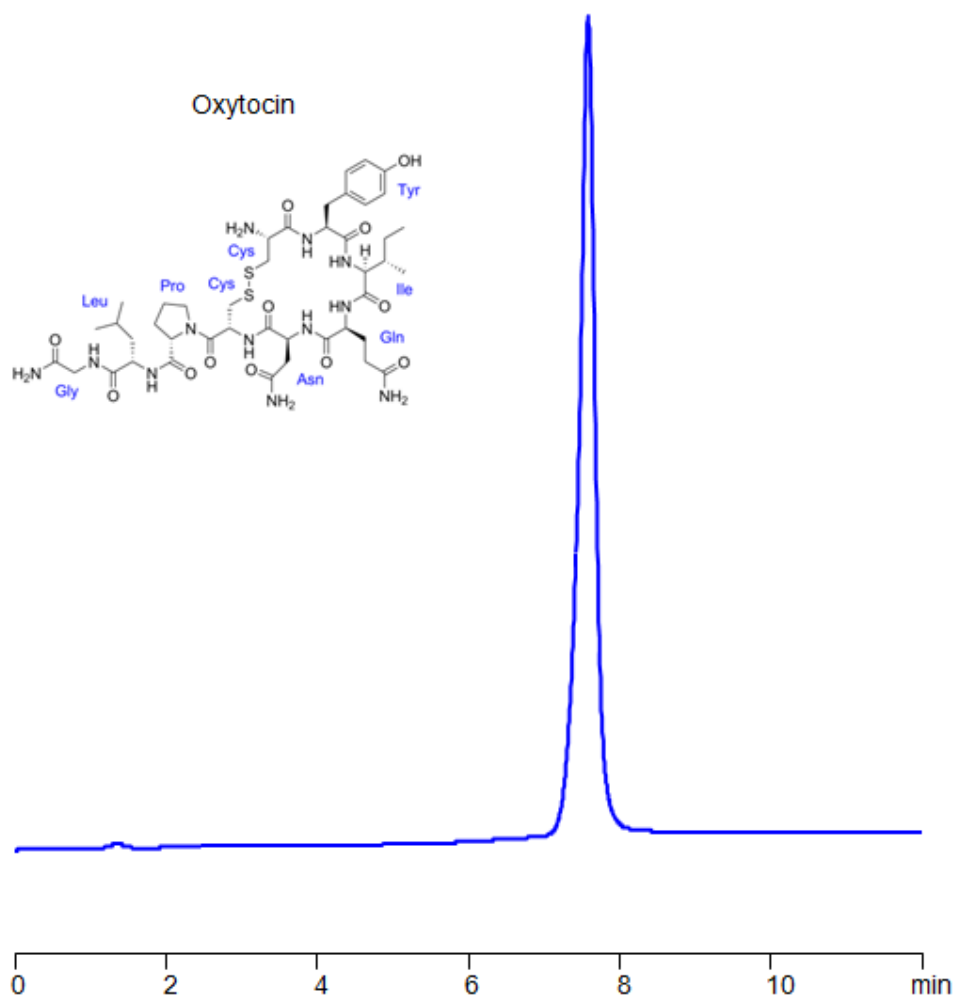


HPLC-UV Method for Analysis of Oxytocin on Primesep 200 Column

<https://sielc.com/hplc-determination-of-oxytocin-uv>

Chromatogram



Column:	Primesep 200
Column size:	2.1 × 100 mm, 5 µm
Column part number:	200-21.100.0510
Mobile phase:	Gradient MeCN – 10-70%, 10 min
Buffer:	H ₂ SO ₄ – 0.2%
Flow rate:	0.2 mL/min
Detection:	UV 200 nm

Description

· HPLC Method for Analysis of Oxytocin on Primesep 200 Column by SIELC Technologies

Oxytocin is a neuropeptide and a hormone with the chemical formula C₄₃H₆₆N₁₂O₁₂S₂. Its chemical structure is Cys-Tyr-Ile-Gln-Asn-Cys-Pro-Leu-Gly, and it has a disulfide bond between the two cysteine residues. It plays a significant role in social bonding, sexual reproduction, childbirth, and the period after childbirth. It is often called the “love hormone” or “bonding hormone” because of its association with social interactions, including maternal behaviors, bonding between couples, and even the bond between humans and their pets. Oxytocin is produced in the hypothalamus and stored in and secreted by the posterior

pituitary gland. It's released into the bloodstream in response to various stimuli, such as stretching of the cervix and uterus during labor, nipple stimulation from breastfeeding, and more. You can find detailed UV spectra of Oxytocin and information about its various lambda maxima by visiting the following link.

Oxytocin can be retained, and analyzed on a Primesep 200 mixed-mode stationary phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a Sulfuric acid as a buffer. This analysis method can be detected in the UV 200 nm.

Method Parameters

Mobile Phase	Gradient MeCN – 10-70%, 10 min
Buffer	H2SO4 – 0.2%
Flow Rate	0.2 ml/min
Detection	UV 200 nm
Peak Retention Time	7.77 min
Class of Compounds	Neuropeptide, Hormone
Analyzing Compounds	Oxytocin

HPLC Column Used

Primesep 200, 2.1 x 100 mm, 5 µm, 100 Å, dual ended

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