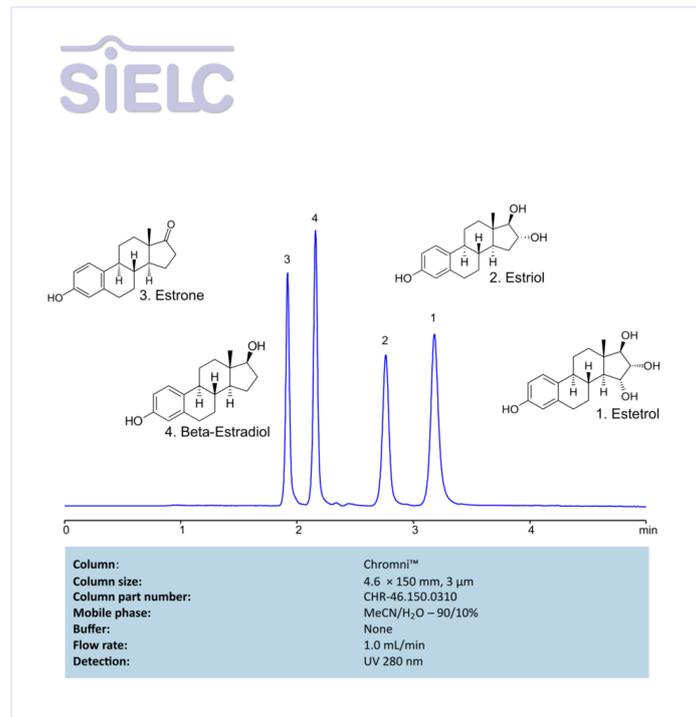


HPLC Method for Analysis of Estetrol, Estiol, Estrone, and Besta-Estradiol Without Buffer on Chromni Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of Estrone , Estradiol , Estiol , Estetrol

Estetrol is an estrogenic steroid hormone compound with the molecular formula C₁₈H₂₄O₄ .

Properties: Appearance: Typically a white, odorless, powder.

Molecular weight: ~270.4 g/mol

Solubility: Soluble in water.

Uses: Production of contraceptives.

Estiol is an estrogenic steroid hormone compound with the molecular formula C₁₈H₂₄O₃ .

Molecular weight: ~288.4 g/mol

Solubility: Soluble in benzene, water, alcohol, and vegetable oils.

Uses: Hormone Replacement Therapy and similar medication.

Estrone is a synthetic estrogenic steroid hormone with the molecular formula C₁₈H₂₂O₂ .

Properties: Appearance: Typically a white, odorless, crystals.

Solubility: Soluble in benzene, water, acetone, and vegetable oils.

Uses: Production of medication

Beta-Estradiol is an estrogenic steroid hormone compound with the molecular formula C₁₈H₂₄O₂ .

Molecular weight: ~272.4 g/mol

Solubility: Soluble in ethanol, water, and vegetable oils.

Uses: Production of medication for treatment of menopausal symptoms

Estrone , Estradiol , Estriol , Estetrol can be retained and analyzed using the Chromni stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN). Detection is performed using UV.

Method Parameters

Column	Chromni, 4.6 x 150 mm, 3 µm, 100 Å, dual ended
Mobile Phase	MeCN – 90%
Buffer	None
Flow Rate	1.0 mL/min
Detection	UV 280 nm

Quelle: <https://sielc.com/hplc-method-for-estetrol-estiol-estrone-beta-estradiol-without-buffer>