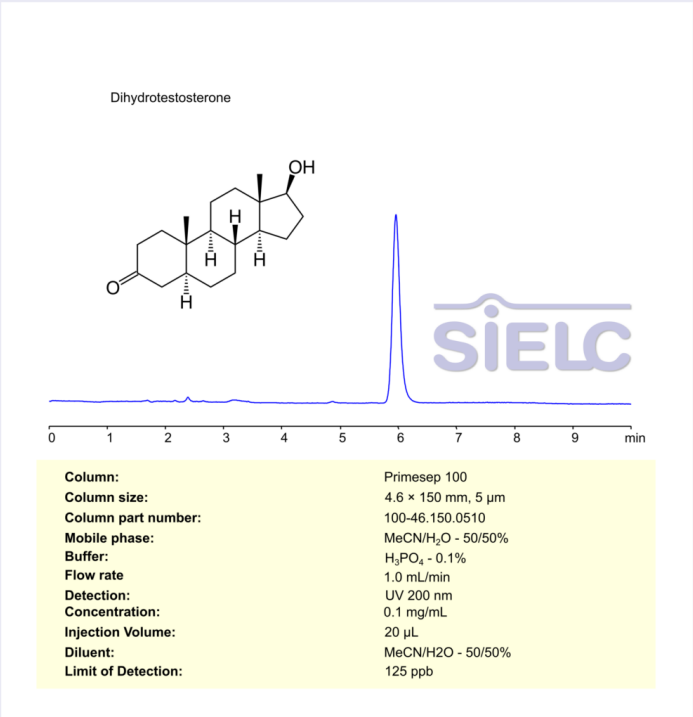
HPLC Method for Analysis of Dihydrotestosterone on Primesep 100 Column



Separation type: Liquid Chromatography Mixed-mode SIELC Technologies

Dihydrotestosterone (DHT) is an androgen hormone derived from testosterone through the action of the enzyme 5-alpha-reductase. It plays a crucial role in the development of male characteristics, including facial and body hair growth, deepening of the voice, and muscle development. Due to its potent androgenic effects, elevated levels of DHT are associated with conditions such as androgenetic alopecia (male pattern baldness) and benign prostatic hyperplasia (enlarged prostate).

5alpha-Dihydrotestosterone can be retained, separated and analyzed using a Primesep 100 mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and phosphoric acid as a buffer. This method allows for detection using UV 200 nm.

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 50%
Buffer	H3PO4 – 0.1%
Flow Rate	1.0 mL/min
Detection	UV 200
Sample	0.1 mg/mL

Quelle: https://sielc.com/hplc-method-dihydrotestosterone

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