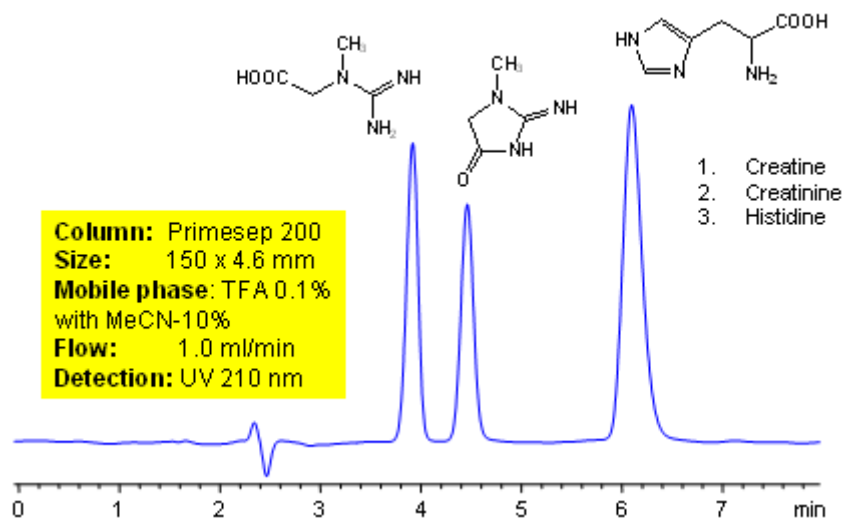


HPLC Separation of Creatine, Creatinine and Histidine

<https://sielc.com/Application-HPLC-Separation-of-Creatine-Creatinine-and-Histidine>

Chromatogram



Description

Creatine is produced by the body and plays a major role in recycling ATP. It also stabilizes pH in certain tissues. Creatine can be analyzed by this reverse phase (RP) HPLC method with simple conditions. The mobile phase contains acetonitrile (MeCN), water, and TFA. For Mass-Spec (MS) compatible applications the phosphoric acid needs to be replaced with formic acid. Smaller 3 μm particle columns are available for fast UPLC applications. This liquid chromatography method is scalable and can be used for isolation of impurities in preparative separation. It is also suitable for pharmacokinetics.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 10/90%
Buffer	TFA -0.1%
Flow Rate	1.0 ml/min
Detection	UV, 210 nm
Class of Compounds	Drug, Acid, Hydrophilic, Ionizable, Hormone
Analyzing Compounds	Creatine, Creatinine, Histidine

HPLC Column Used

Primesep 200, 4.6x150 mm, 5 μm , 100A

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