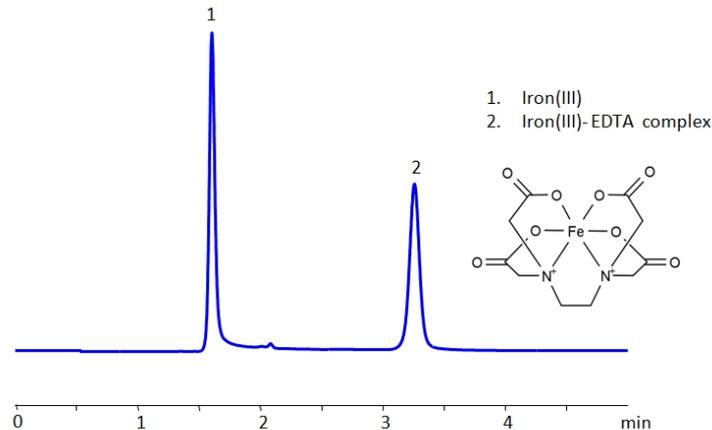


HPLC Determination of EDTA on Newcrom BH Column



Column:	Newcrom BH
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	MeCN/H ₂ O – 2/98%
Buffer:	H ₂ SO ₄ – 0.1%
Flow rate:	1 ml/min
UV detection:	260 nm

EDTA Standards Solution A: For the preparation of the EDTA standard solution, 5 mg of EDTA was accurately weighed and transferred into a 5 mL volumetric flask and dissolved in 0.001N NaOH water solution with sonication or magnetic stirrer mixing. Filtered The EDTA stock solution (1.0 mg/mL) should be stored in a cold dark place and can be used for a week to prepare standards of required concentration.

Iron(III) chloride Solution B: The standard stock solution of Iron(III) chloride (10 mg/ml) was prepared in water. 50 mg of FeCl₃ was accurately weighed and transferred into a 5 mL volumetric flask and dissolved in water, with sonication if needed.

General procedure for Ferric EDTA complex analysis: To make a sample for analysis mix 100 µL Solution A (or unknown sample) with 100 µL Solution B and 800 µL of water. Place this mixture in a plastic HPLC vial for analysis. Setup instrument and column according to the method provided.

The Newcrom columns are a family of reverse-phase-based columns. Newcrom A , AH , B , and BH are all mixed-mode columns with either positive or negative ion-pairing groups attached to either short (25 Å) or long (100 Å) ligand chains. Newcrom R1 is a special reverse-phase column with low silanol activity.

Method Parameters

Column	Newcrom BH, 4.6×150 mm, 100 Å
Mobile Phase	MeCN/H ₂ O – 2/98%
Buffer	H ₂ SO ₄ – 0.1%
Flow Rate	1.0 mL/min
Detection	UV 260 nm

Quelle: <https://sielc.com/hplc-determination-of-edta-on-newcrom-bh-column>