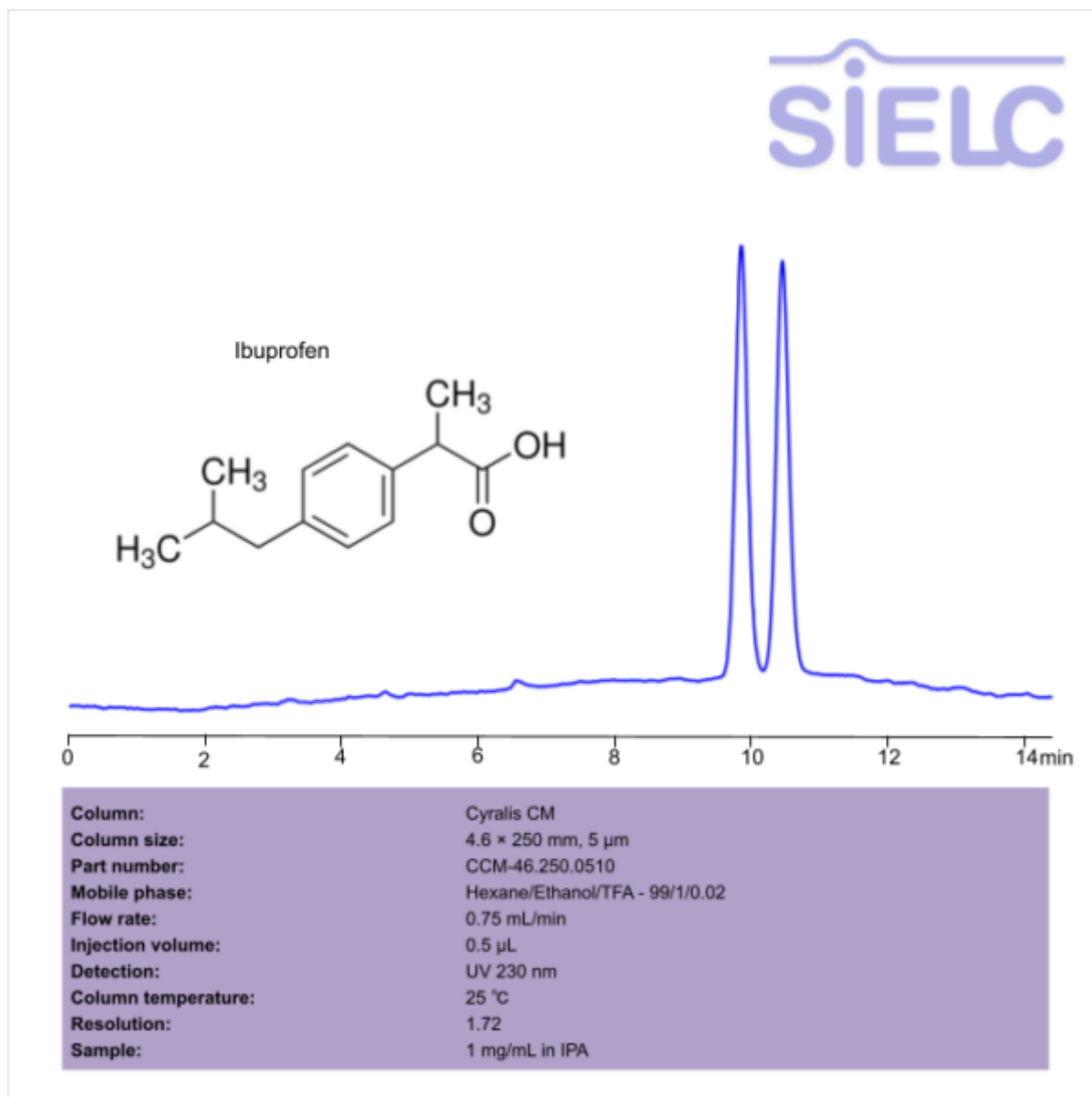


HPLC Chiral Separation of Ibuprofen on Cyralis CM Column

<https://sielc.com/hplc-chiral-method-for-analysis-of-ibuprofen>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Ibuprofen .

Ibuprofen is a nonsteroidal anti-inflammatory drug (NSAID) with the chemical formula $C_{13}H_{18}O_2$. It is used primarily to relieve pain, fever, and inflammation. There are numerous adverse effects to taking ibuprofen, including but not limited to nausea, heightened risk of hypertension, kidney impairment, and bronchospasm. You can find detailed UV spectra of Ibuprofen and information about its various lambda maxima by visiting the following link.

This application describes a normal-phase chiral HPLC method for the separation of Ibuprofen enantiomers using SIELC's Cyralis CM chiral column. Cyralis CM is a cellulose-based chiral stationary phase (CSP) designed for enantiomeric separations, optical purity testing, chiral impurity analysis, and stereoisomer characterization in pharmaceutical, chemical, agrochemical, and fine chemical applications. For best results, the sample should be prepared fresh for analysis.

Ibuprofen can be retained and analyzed using the Cyralis CM stationary phase column. The analysis utilizes an isocratic method with a mobile phase consisting of Hexane, Ethanol, and TFA. Detection is performed using UV.

Method Parameters

Mobile Phase	Hexane/Ethanol/TFA- 99/1/0.02%
Flow Rate	0.75 mL/min
Detection	UV 230 nm
Resolution	1.72
Class of Compounds	Medication
Analyzing Compounds	Ibuprofen

HPLC Column Used

Cyralis CM, 4.6 x 250 mm, 5 µm, 100 Å, dual ended

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