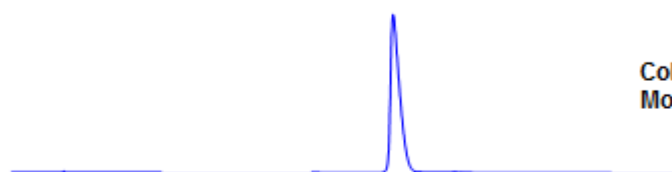
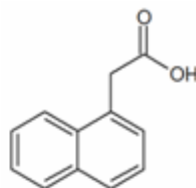


# 1-Naphthaleneacetic acid (NAA) Separation on Primesep and Obelisc Mixed-Mode Columns

<https://sielc.com/compound-1-naphthalene>

## Chromatogram

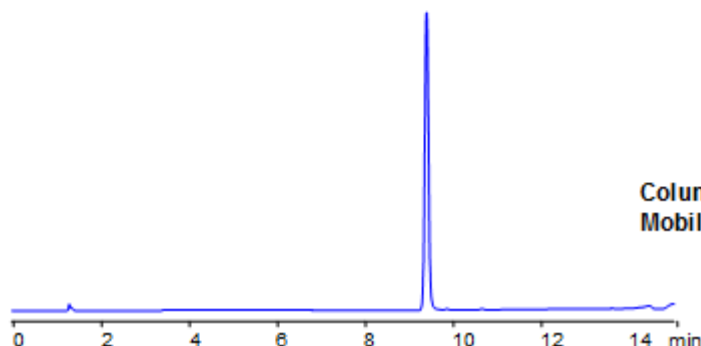
**Size:** 2.1 x 150 mm  
**Flow:** 0.4 mL/min  
**Detection:** UV 270 nm



**Column:** Obelisc R 5 µm  
**Mobile phase:** MeCN gradient 25% to 70% in 15 min, AmFm pH 3.0 gradient from 30 mM to 60 mM



**Column:** Obelisc R 5 µm  
**Mobile phase:** MeCN gradient 10% to 70% in 15 min, AmFm pH 3.0 gradient from 20 mM to 60 mM



**Column:** Primesep 100 3 µm  
**Mobile phase:** MeCN gradient 10% to 70% in 15 min, AmFm pH 3.0 gradient from 20 mM to 60 mM

## Description

1-Naphthylacetic acid (NAA) is a synthetic plant hormone which is useful for promoting growth and propagating leaf and stem cuttings. Auxins can prevent early thinning and dropping of fruits from stems. But at slightly elevated levels, it can be toxic to plants and animals. A single residue method was developed using QuEChERS (Quick, Easy, Cheap, Effective, Rugged, and Safe) method, to be used by EURL (European Union Reference Laboratory). 1-Naphthylacetic acid was separated by both Obelisc R and Primesep 100. Primesep 100 is a reverse-phase column with embedded acidic ion-pairing groups while Obelisc R is a mixed-mode column with separates using ionic groups and a long hydrophobic chain. Methods are LC/MS compatible and able to be used with many pesticides.

## Method Parameters

<b>Mobile Phase</b>	Gradient MeCN – 10-70%, 15 min
<b>Buffer</b>	Gradient AmAc pH 3.0- 20-60 mM, 15 min
<b>Flow Rate</b>	0.4 ml/min

<b>Detection</b>	UV, 270 nm
<b>Class of Compounds</b>	Synthetic plant hormone, Acid, Hydrophobic, Ionizable
<b>Analyzing Compounds</b>	1-Naphthaleneacetic acid (NAA)

#### HPLC Column Used

**Primesep 100, 2.1×150 mm, 3 µm, 100A**

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