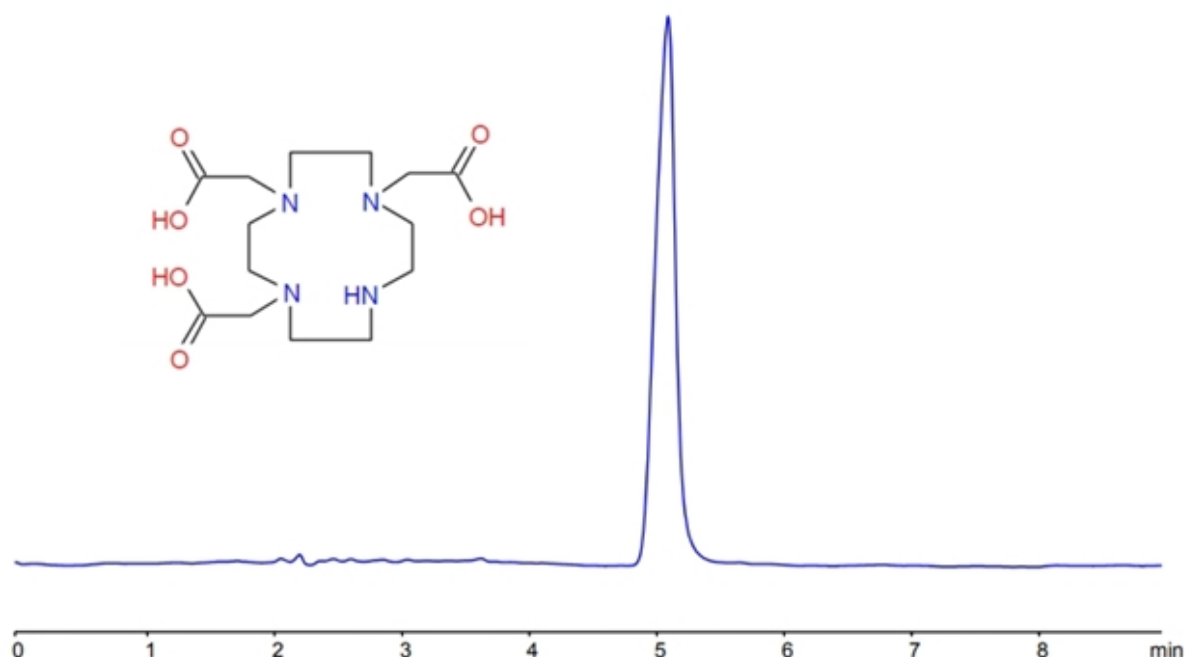


# HPLC Method for Determination of DO3A on Primesep 200 Column

<https://sielc.com/hplc-determination-of-do3a-on-primesep-200-column>

## Chromatogram



|                      |                                        |
|----------------------|----------------------------------------|
| <b>Column:</b>       | <b>Primesep 200</b>                    |
| <b>Column size:</b>  | 4.6 × 150 mm, 5 µm                     |
| <b>Mobile phase:</b> | MeCN/H <sub>2</sub> O – 30/70%         |
| <b>Buffer:</b>       | H <sub>3</sub> PO <sub>4</sub> - 0.02% |
| <b>Flow rate:</b>    | 1 mL/min                               |
| <b>UV detection:</b> | 200 nm                                 |

## Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of DO3A .

DO3A is a derivative of DOTA and has the chemical formula  $C_{12}H_{16}N_4O_8Na$ . DOTA is an acronym for 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid. It is used to bind metal ions, partially due to its stability. It is often employed in biomedical applications including but not limited to MRI contrast agents and targeted cancer therapy.

DO3A can be retained and analyzed using the Primesep 200 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a [buffer] buffer. Detection is performed using UV.

## Method Parameters

|              |                                         |
|--------------|-----------------------------------------|
| Mobile Phase | MeCN/H <sub>2</sub> O – 30/70%          |
| Buffer       | H <sub>2</sub> SO <sub>4</sub> – 0.02 % |
| Flow Rate    | 1.0 ml/min                              |

|                            |                                                                   |
|----------------------------|-------------------------------------------------------------------|
| <b>Detection</b>           | UV, 200 nm                                                        |
| <b>Class of Compounds</b>  | Acid, Hydrophilic, Ionizable, Carboxylic acid, Drug, Carbocyclic. |
| <b>Analyzing Compounds</b> | DO3A                                                              |

#### HPLC Column Used

#### Primesep 200

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