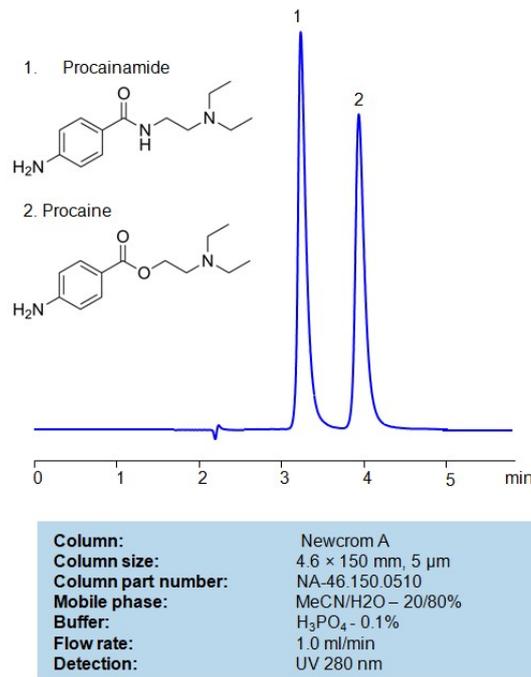


## HPLC Method for Separation of Procainamide and Procaine on Newcrom A Column



Procainamide and procaine are two different pharmaceutical compounds with distinct uses and properties.

Procainamide is primarily used for cardiac conditions, while procaine is utilized as a local anesthetic for pain management during medical and dental procedures. While both compounds have a shared ancestry in PABA and contain amine groups, the specific functional groups (amide vs. ester) and their positions in the molecules contribute to their distinct pharmacological properties. It's a good observation that small structural changes can lead to significant differences in the pharmacological actions of compounds.

Procainamide and Procaine can be retained, separated and analyzed using a Newcrom A mixed-mode stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN), and phosphoric acid as a buffer. Detection is achieved using UV 280 nm

### Method Parameters

<b>Column</b>	Newcrom A, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O -20/80%
<b>Buffer</b>	H <sub>3</sub> PO <sub>4</sub> – 0.1%
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	UV 280 nm

Quelle: <https://sielc.com/hplc-method-for-analysis-procainamide-procaine>