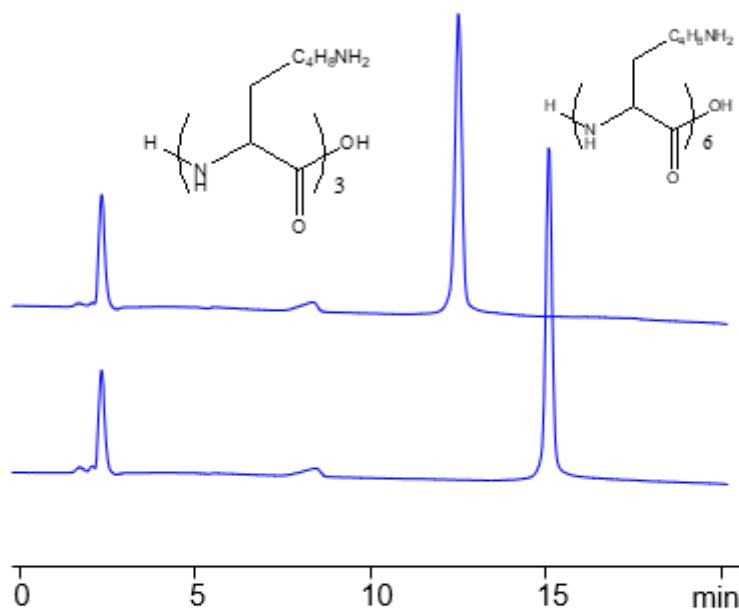


Separation of Small Lysine-based Peptide Oligomers on BIST B+ Column

<https://sielc.com/Application-Separation-of-Small-Lysine-based-Peptide-Oligomers>

Chromatogram



Column:	BIST B+
Column size:	4.6 × 50 mm, 5 μm
Mobile phase:	Gradient MeCN - 85 -50%
Gradient time:	18 min
Buffer:	H ₃ PO ₄ – 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 215 nm

Description

Polylysine includes a large group of similar polymers with various uses. Some are used as food preservatives, while others are used for drug delivery in pharmaceuticals. Polymers with charged monomeric units, such as polylysine, are often difficult to separate using typical ion-exchange chromatography due to very strong and often irreversible interactions with the oppositely charged column surface. Therefore, an extremely high concentration of the buffer, up to several molar, is usually needed to facilitate an ion-exchange process. This high buffer concentration, however, is not desirable because of the significantly increased viscosity of the mobile phase and the salt formation in the pump components. With BIST™, these polymers can be separated and retained with relatively weak buffers (in the mM regime) and a fairly simple gradient. Using this new and unique analysis method, polylysine can be retained and UV detected at 215 nm.

Method Parameters

Mobile Phase

MeCN/H₂O

Buffer	H3PO4
Flow Rate	1.0 ml/min
Detection	UV 215 nm
Class of Compounds	Drug, Acid, Hydrophilic, Ionizable, Vitamin, Supplements
Analyzing Compounds	Lysine-based Peptide Oligomers

HPLC Column Used

BIST B+, 4.6×150 mm, 5 µm, 100A

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