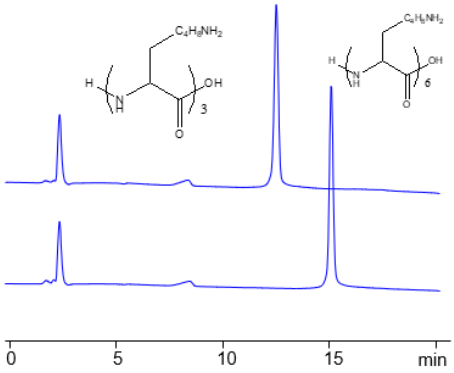
Separation of Small Lysine-based Peptide Oligomers on BIST B+ Column



Column:	BIST B+
Column size:	4.6 × 50 mm, 5 µm
Mobile phase:	Gradient MeCN - 85 -50%
Gradient time:	18 min
Buffer:	H_3PO_4 – 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 215 nm

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

Column	BIST B+, 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O
Buffer	H3PO4
Flow Rate	1.0 mL/min
Detection	UV 215 nm

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

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de