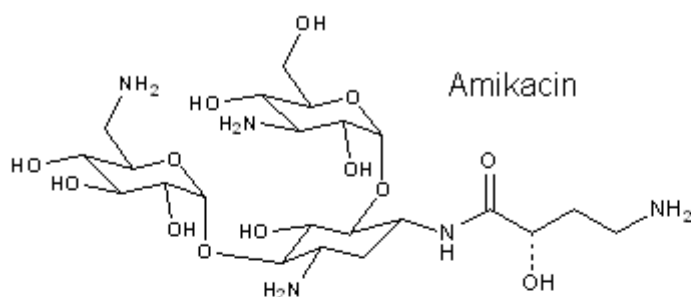


HPLC Method of Amikacin on Obelisc R Column

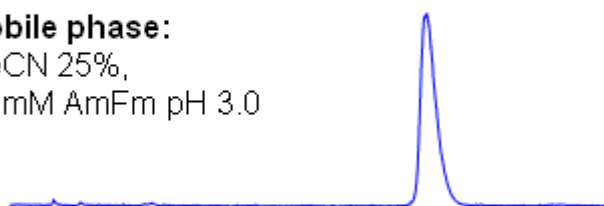
<https://sielc.com/Application-Retention-of-Amikacin-on-Obelisc-R-Column>

Chromatogram



Mobile phase:

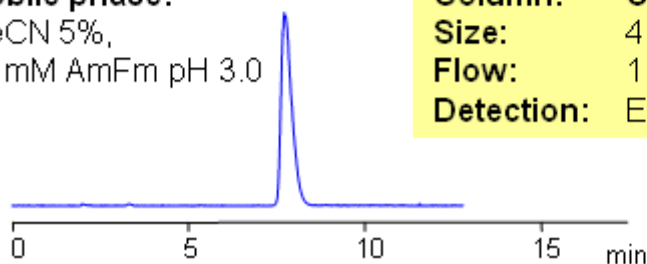
MeCN 25%,
75 mM AmFm pH 3.0



Mobile phase:

MeCN 5%,
75 mM AmFm pH 3.0

Column:	Obelisc R
Size:	4.6 x 150 mm
Flow:	1.0 mL/min
Detection:	ELSD 60°C



Description

Amikacin is an aminoglycoside antibiotic used to treat different types of bacterial infections. Most of aminoglycoside antibiotic are very polar compounds containing several amino groups and sugar fragments. Such compounds are not retained on reverse phase column without ion-pairing reagents. In this application Amikacin is retained on Obelisc R column without ion-pairing reagent. Retention is contributed to mixed-mode mechanism and can be adjusted by buffer pH and buffer concentration. Amount of organic modifier (acetonitrile, tetrahydrofuran, etc.) can be used for fine tuning and improvement of peak shape. Other amino sugars can be analyzed using mixed-mode stationary phases with ELSD, LC/MS and prep chromatography compatible mobile phases.