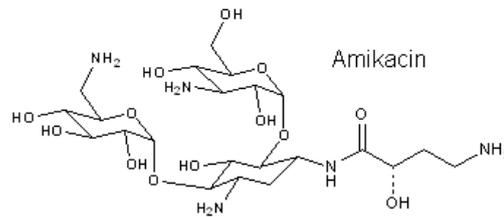
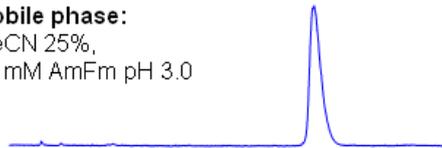


## HPLC Method of Amikacin on Obelisc R Column



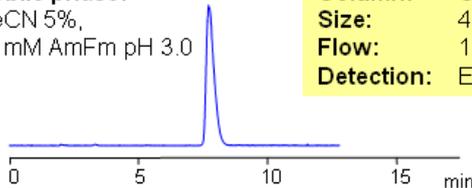
### Mobile phase:

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

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.

SIELC has developed the Obelisc™ columns, which are mixed-mode and utilize Liquid Separation Cell technology (LiSC™). These cost-effective columns are the first of their kind to be commercially available and can replace multiple HPLC columns, including reversed-phase (RP), AQ-type reversed-phase, polar-embedded group RP columns, normal-phase, cation-exchange, anion-exchange, ion-exclusion, and HILIC (Hydrophilic Interaction Liquid Chromatography) columns. By controlling just three orthogonal method parameters - buffer concentration, buffer pH, and organic modifier concentration - users can adjust the column properties with pinpoint precision to separate complex mixtures.

### Method Parameters

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