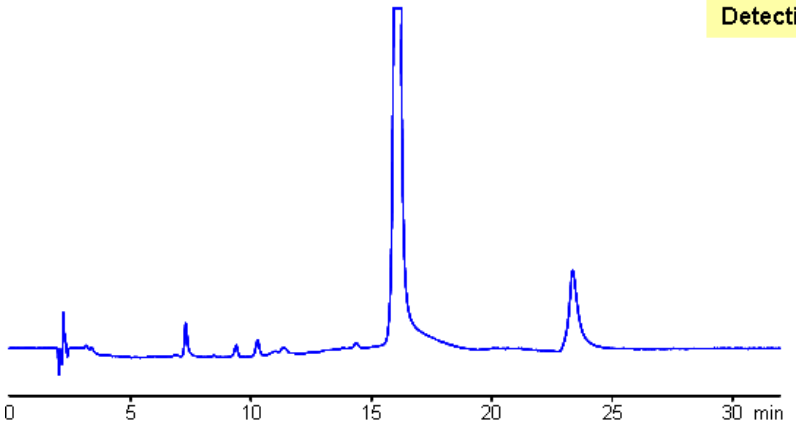
Analysis of Antibiotic Norfloxacin and Related Impurities in Mixed-Mode Chromatography

Column:	**Obelisc R**
Size:	4.6 x 150 mm
Mobile phase:	MeCN gradient 5% to 30% in 10 min , 5 min hold, Formic acid gradient 0.05% to0.3% in 10 min, 5 min hold
Flow:	1.0 mL/min
Detection:	UV 270 nm



The antibiotic norfloxacin is a first generation fluoroquinolone. It is effective against both gram positive and gram negative bacteria. Analysis was done on Obelisc R and Primesep D.

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

Column	Obelisc R, 2.1×150 mm, 5 µm, 100 Å
Mobile Phase	Gradient MeCN – 5-30%, 10 min, 5 min hold
Buffer	Gradient Formic Acid – 0.05%-0.3%, 10 min, 5 min hold
Flow Rate	1.0 mL/min
Detection	UV, 270 nm

Quelle:
https://sielc.com/Analysis_of_Antibiotic_Norfloxacin_and_Related_Impurities_in_Mixed-Mode_Chromatography