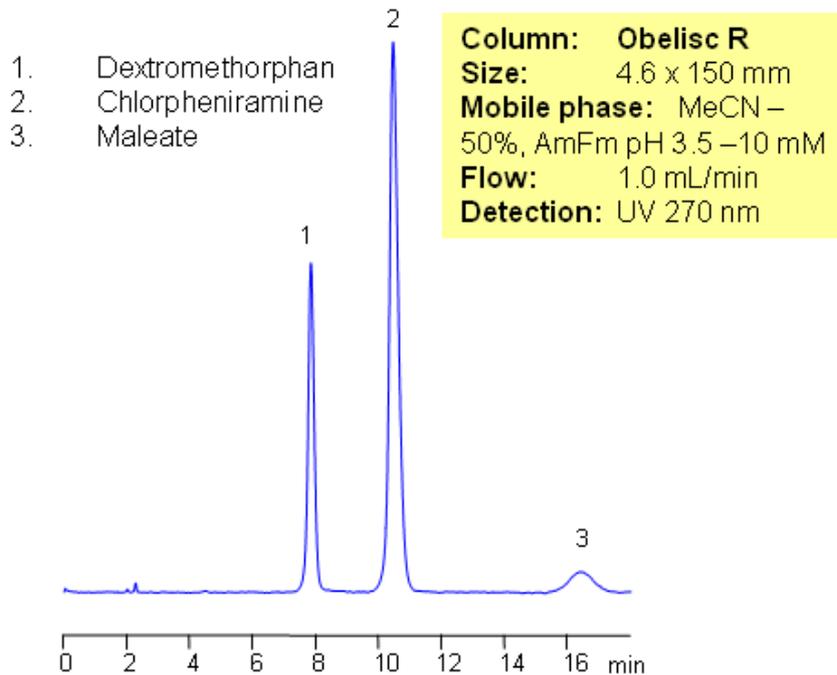


Separation of Drugs in Mixed-Mode HPLC



Obelisc R column can be successfully used for analysis of hydrophobic and hydrophilic basic and acidic drugs and corresponding counter-ions. This approach can be used for analysis of various cold and cough composition, pain killers, and other prescription and over-the-counter medications. Within pH 3-5, both cation- and anion mechanism are present on the column, along with hydrophobic interaction. Selectivity of this mixed-mode separation is controlled by the amount of acetonitrile, buffer concentration and buffer pH. Method is robust and reproducible, and can be used as a common HPLC method for analysis of drug molecules and compositions.

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, 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeCN
Buffer	AmFm
Flow Rate	1.0 mL/min
Detection	UV, 270 nm

Quelle: <https://sielc.com/Application-Separation-of-Drugs-in-Mixed-Mode-HPLC>