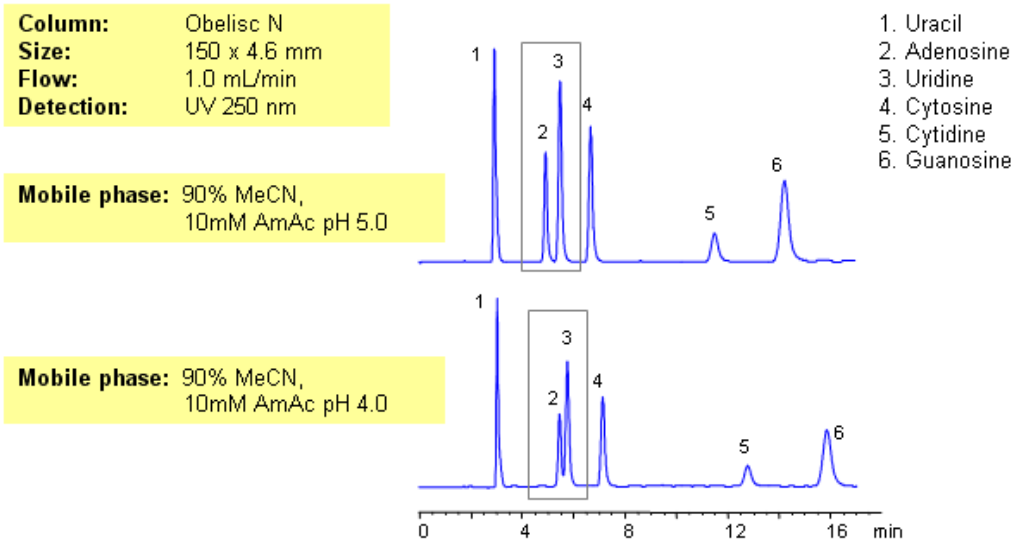
HPLC Separation of Nucleic Bases at pH 4 and 5 on Obelisc N



Nucleic bases are biological compounds found in genetic molecules (DNA, RNA). They can be separated on an Obelisc N column, which offers very polar characteristics and can be used with positively or negatively charged groups. Closely-eluted adenosine and uridine can be further separated by simply adjusting the pH of the mobile phase. Mobile phase is water and acetonitrile (MeCN, ACN) with Ammonium Acetate as buffer. UV detection at 250 nm.

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 N, 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeCN -90%
Buffer	AmAc
Flow Rate	1.0 mL/min
Detection	UV, 250 nm

Quelle: https://sielc.com/Application-HPLC-Separation-of-Nucleic-Bases-At-PH-4-and-5-on-Obelisc-N