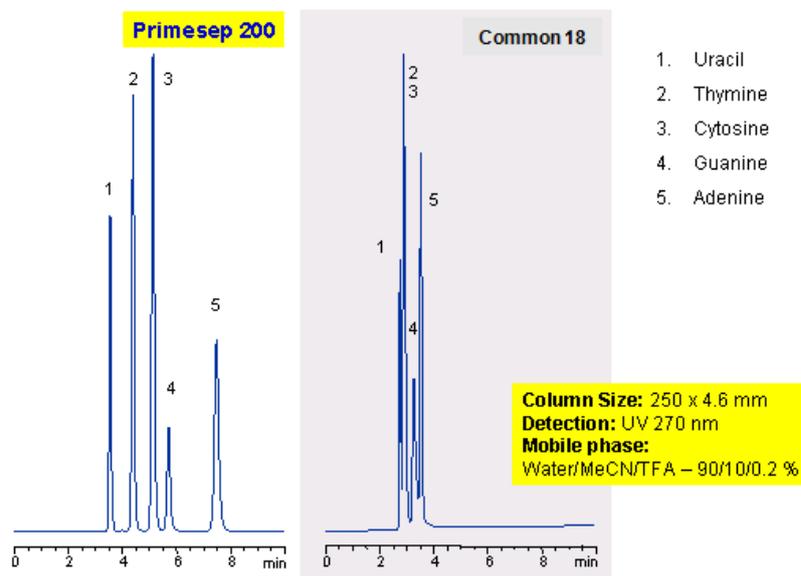


HPLC Application for Separation of Nucleotide Bases Uracil, Thymine, Guanine, Cytosine, Adenine on Primesep 200 Column



Nucleotide bases are parts of DNA and RNA. Adenine and guanine are purine-bases; uracil, thymine and cytosine are pyrimidine-bases. In the view of chromatography these compounds are very polar and similar in properties. It is hard to obtain base line HPLC separation on traditional C18 as peaks of nucleotide bases co-elute even at low organic concentration. In this application nucleobases are well retained and separated on Primesep 200 mixed-mode column. Compounds are retained by weak reverse phase and weak ion-exchange mechanisms. This HPLC method can utilize UV, ELSD, and LC/MS detection.

Method Parameters

Column	Primesep 200, 4.6*250 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H ₂ O – 10/90%
Buffer	TFA – 0.2%
Flow Rate	0.5 mL/min, 1.0 mL/min
Detection	UV, 270 nm

Quelle: <https://sielc.com/Application-HPLC-Application-For-Separation-of-Nucleotide-Bases>