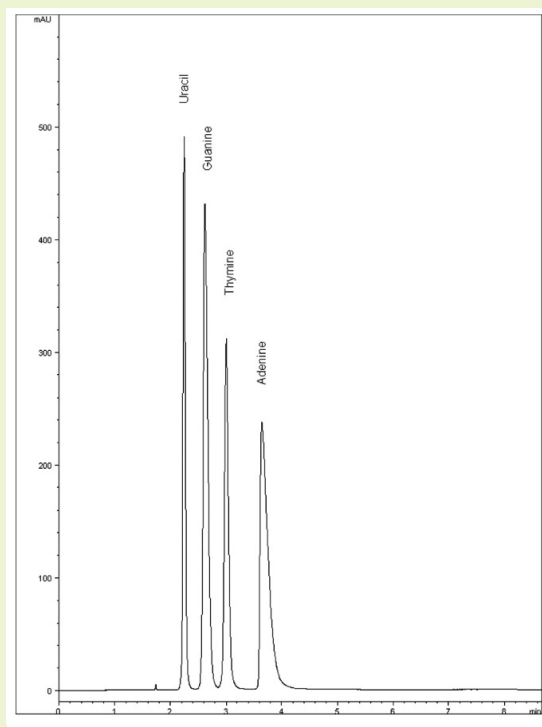
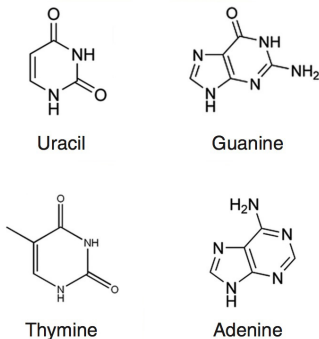


Nucleotide Bases: Orthogonal Method

Excellent Peak Shape, Resolution, MS Friendly



Notes: Nucleobases (or Nucleotide bases) are the parts of DNA and RNA that may be involved in pairing. The main bases are cytosine, guanine, adenine (DNA and RNA), thymine (DNA) and uracil (RNA), abbreviated as C, G, A, T, and U, respectively. They are usually simply called bases in genetics. Because A, G, C, and T appear in the DNA, these molecules are called DNA-bases; A, G, C, and U are called RNA-bases.

Method Conditions

Column: Cogent Diamond Hydride™, 4µm, 100Å

Catalog No.: 70000-75P

Dimensions: 4.6 x 75 mm

Mobile Phase: DI H₂O/ 0.1% acetic acid

Temperature: 25°C

Injection vol.: 2.5µL

Flow rate: 1 mL/min

Detection: UV 254 nm

- Peaks:**
1. Uracil
 2. Guanine
 3. Thymine
 4. Adenine

Discussion

This method is easy to prepare, use and reproduce. Note excellent separation under 100% aqueous conditions with alternate selectivity. These bases are difficult to retain on columns with ordinary silica that contain significant amounts of silanols.