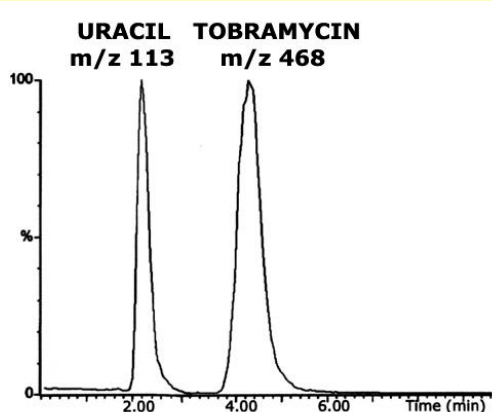
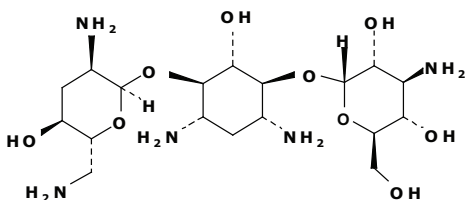




Cogent™

UDC Cholesterol™

AminoGlycoside: Tobramycin by LCMS



Note: Aminoglycoside drugs are difficult to retain on conventional HPLC columns because of their highly polar characteristics. Ion pair reagents have to be used in order to induce retention, but they interfere with MS detection. UV detection requires derivatization of the drug.

No ion pair agents were used in the above.

Method Conditions

Column:	Cogent UDC Cholesterol™, 4μm, 100Å.
Catalog No.:	69069-7.5P
Dimensions:	4.6 x 75 mm
Mobile phase:	60:40 acetonitrile/DI water + 0.5% formic acid
Temperature:	Ambient
pH:	2.90
Flow rate:	0.5 mL/minute
Injection Volume:	1 μL
Samples:	Uracil (m/z 113), Tobramycin (m/z 468) 1 mg/L of each dissolved in DI water
Detection:	Mass Spec: Atmospheric Pressure Chemical Ionization in positive mode: APCI+ Single Ion Monitoring

Discussion

Tobramycin is a drug used for treatment in patients with cystic fibrosis and other diseases caused by gram-negative bacteria. It has a very narrow therapeutic range, so monitoring of the drug in patients' serum is crucial to avoid devastating side effects. A simple, isocratic method for analyzing Tobramycin is presented:

NO DERIVATIZATION AND NO ION PAIR REAGENTS ARE USED IN THE METHOD.

Symmetrical peak shape and reasonable retention make this method an excellent choice for an assay of this drug.

For more information visit www.MTC-USA.com

Cat. No.	Description
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69069-7.5P	Cogent UDC-Cholesterol™ HPLC Column, 100Å 4μm, 4.6mm x 75mm, Standard End Fittings.
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