

## Gradient Chemical Stability Study on XBridge HILIC

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Waters Corporation



This is an Application Brief and does not contain a detailed Experimental section.

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### Abstract

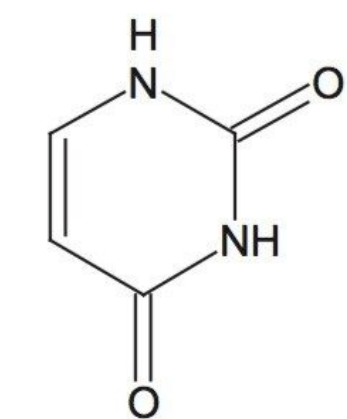
This application brief demonstrates the gradient chemical stability study on XBridge HILIC column.

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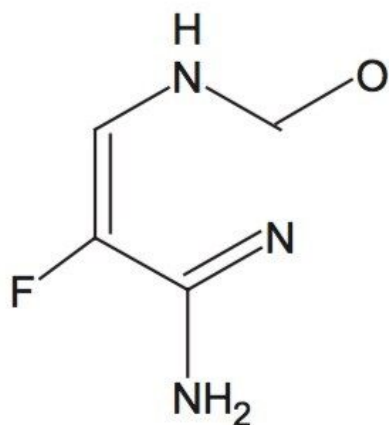
## Introduction

The compounds used in this study are-

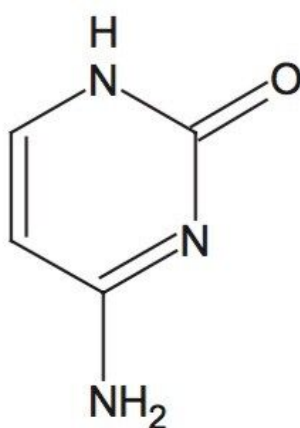
1. Uracil
2. 5-Fluorocytosine
3. Cytosine



Uracil  
m.w. 112.09



5-Fluorocytosine  
m.w. 129.09



Cytosine  
m.w. 111.1

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Figure 1. Structures of the compounds used in this study.

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## Experimental

### Test Conditions

Column:	XBridge HILIC, 2.1 x 50 mm, 3.5 µm
Part Number:	186004432
Mobile Phase A:	95:5 acetonitrile:water with 10 mM NH <sub>4</sub> + CH <sub>3</sub> COO- pH 5.5
Mobile Phase B:	50:50 acetonitrile:water with 10 mM NH <sub>4</sub> + CH <sub>3</sub> COO- pH 5.5
Flow Rate:	0.5 mL/min
Injection Volume:	2.0 µL (full loop)
Weak Needle Wash:	95:5 acetonitrile:water
Sample Diluent:	75:25 acetonitrile:methanol
Temperature:	30 °C
Detection:	UV @ 254 nm
Sampling Rate:	40 pts/sec
Time Constant:	0.05
Instrument:	Waters ACQUITY UPLC with TUV detector

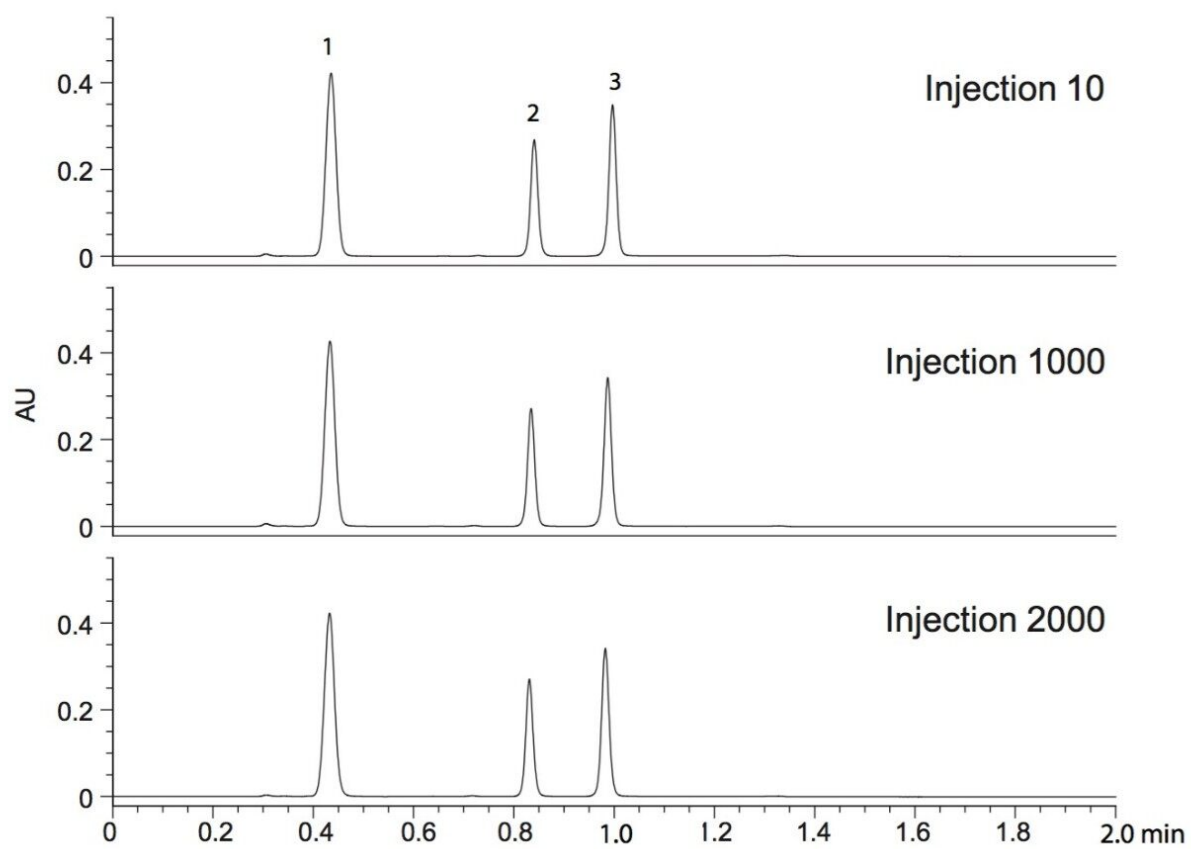
## Gradient:

Time(min) Profile	Curve
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	%A	%B	
0	99	1	6
2.0	1	99	6
2.1	99	1	6
2.5	99	1	6

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## Results and Discussion



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## Featured Products

ACQUITY UPLC System <<https://www.waters.com/514207>>

ACQUITY UPLC PDA Detector <<https://www.waters.com/514225>>

WA64080, August 2009

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