

# Improved Throughput of deoxyNucleosides Using New Column Configurations

## Application

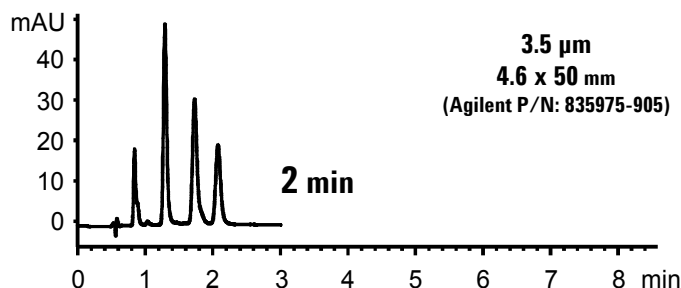
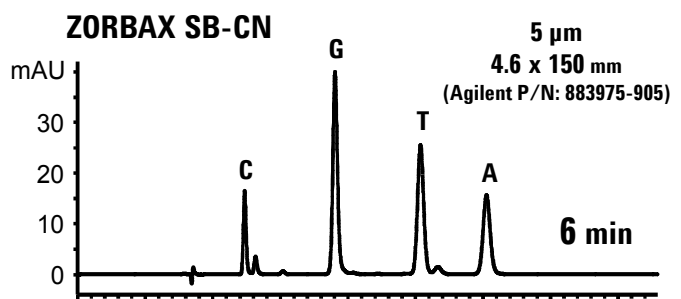
## Biochemical

Robert Ricker

Analysis of deoxynucleosides is commonly performed on hydrolyzed DNA and other samples. While LC allows quantitation, LC-MS allows position confirmation of standard deoxynucleosides, modified deoxynucleosides, and impurities. The following is a very rapid method compatible with LC-MS.

## Highlights

- *Agilent ZORBAX SB-CN provides good selectivity for the 4 standard deoxynucleosides.*
- *Shorter columns having 3.5  $\mu\text{m}$  particles can provide very rapid separations; suitable for LC-MS.*
- *Smaller particle columns (3.5 vs. 5  $\mu\text{m}$ ) can be used at increased flow rates without reduced loss in resolution.*



Conditions:  
LC: HP1090  
Mobile Phase: A: 0.1% TFA  
                  B: 97.5% MeOH : 2.5% H<sub>2</sub>O (0.1% TFA)  
UV: 254 nm; Flow: 1.0 mL / min.; 30°C



**Agilent Technologies**

*Robert Ricker is an application chemist  
based at Agilent Technologies, Wilmington,  
Delaware.*

For more information on our products and  
services, visit our website at:  
[www.agilent.com/chem](http://www.agilent.com/chem)

Copyright© 2002 Agilent Technologies, Inc.  
All Rights Reserved. Reproduction,  
adaptation or translation without prior  
written permission is prohibited, except as  
allowed under the copyright laws.

Agilent shall not be liable for errors  
contained herein or for incidental or  
consequential damages in connection with  
the furnishing, performance, or use of this  
material.

Information, descriptions, and specifications  
in this publication are subject to change  
without notice.

Printed in the USA  
April 25, 2002  
5988-6328EN



**Agilent Technologies**