

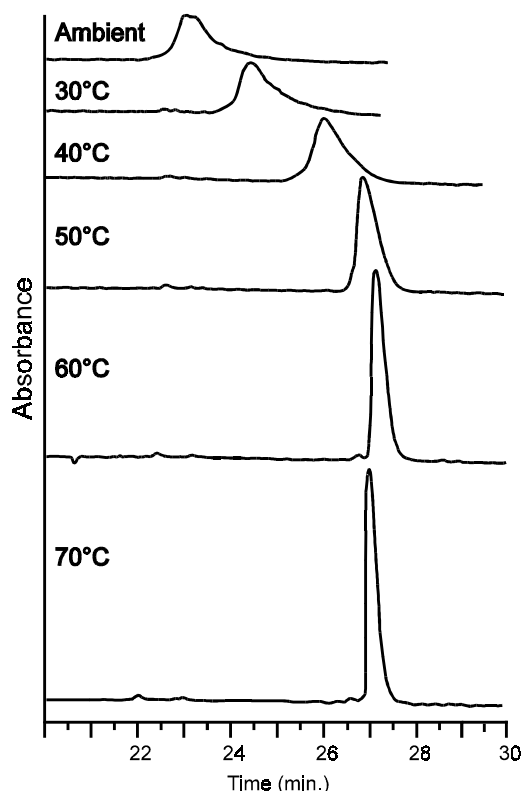
Effect of Elevated Temperatures on Reversed-Phase HPLC of Highly Hydrophobic Peptides

Application

Biochemical

Robert Ricker

Traditionally, extremely hydrophobic peptides have been difficult to chromatograph by reversed-phase methods. This is due to broad and tailing peaks that are difficult to quantify. Below, a very hydrophobic peptide was chromatographed at various increasing temperatures to show the improvement in peak shape at high temperature.



Courtesy of R. Hodges, C. Mant, and P. Semchuk, PENCE, U. of Alberta

Highlights

- Good chromatography of this highly hydrophobic peptide is achieved only by very high-temperature operation.
- Stable, high-temperature chromatography is readily achieved using the sterically protected bonded phases and ultra-pure Rx silica of ZORBAX StableBond Column Packings.
- Peptides and many proteins show good peak shape on standard-pore (80Å) ZORBAX SB packings.

Conditions:
ZORBAX SB-C8 (4.6 x 250 mm) (Agilent P/N: 880967-902)
Mobile Phase: 2% B / min
A=0.05% TFA in H₂O; B=0.05% TFA in ACN
Injection: 100µl (50µg in 6M urea/5% HOAc), 1 mL/min, Ambient, Detect. UV(210 nm)



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

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
5988-6316EN



Agilent Technologies