

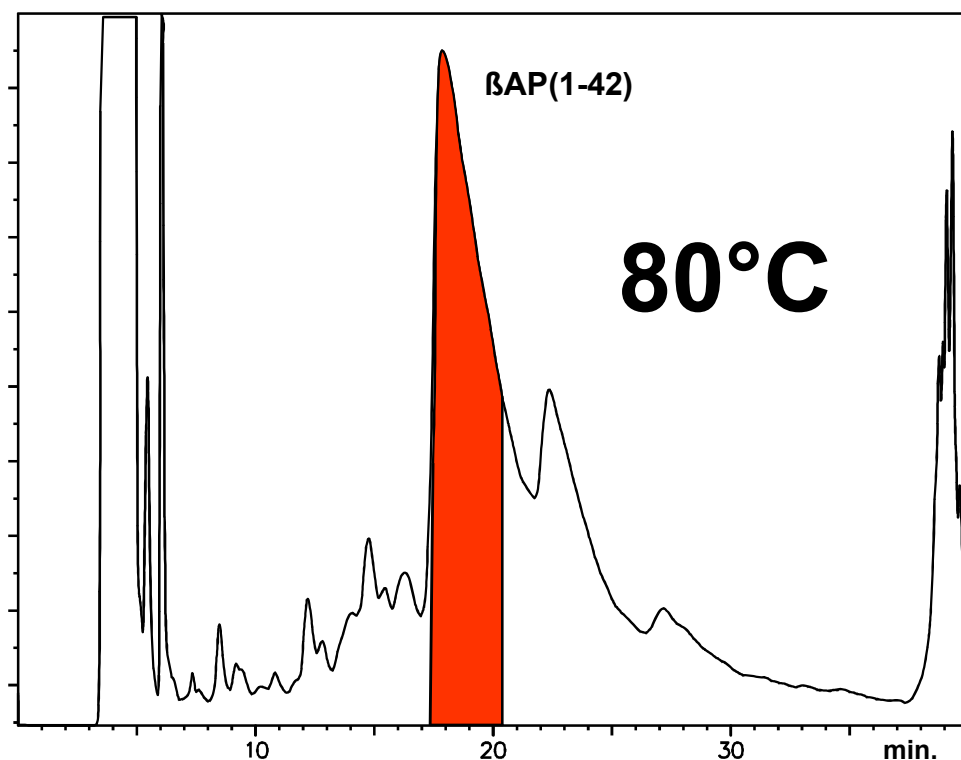
Preparative Separation of a Hydrophobic Peptide

Application

Technical

Robert Ricker

This preparative separation of crude synthetic amyloid $\beta(1-42)$ peptide shows good peak shape and excellent recoveries (> 70%) using high temperature conditions. In comparison, separations at lower temperature are very poor for this highly hydrophobic and aggregative peptide (<10% recovery at 25°C). In a single step, highly purified peptide (> 97%) was obtained.



Conditions:
ZORBAX 300SB-C8, 21.2 x 250mm, 7 μ m; Agilent P/N: 880995-106
Linear Gradient 29 - 33% in 33 min.; A= 0.1% TFA in Water, B= 0.1% TFA in ACN
Temp.: 80°C; Flow: 15mL / min. Det. UV-220nm
Sample: 7.5mL of Crude AB (1-42); 2.5mg / mL (18.75mg)

Highlights

- Highly stable ZORBAX StableBond C8 packing materials can be operated under extreme conditions of high temperature and low pH.
- The highly efficient 2.1 mm ID preparative column packed bed remains stable even at high temperature (80°C).
- Small particle diameter (7 μ m) packing materials permit high resolution, high speed preparative separations with a reasonable load level.



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