APPLICATION NOTE

Penicillin-Binding Proteins Application 2003 LC

Improved Separation of Hydrophobic Penicillin-Binding Proteins

Column : Polaris 5µ C18-A, 150 x 4.6mm;
Part No.: A2000150X046;
Eluent : A: MeCN + 0.1% TFA B: 0.1% TFA
Gradient : 10 - 100% A in 60 min.
Flow : 1.0 mL/min,
Detection : UV @ 280 nm and 320 nm.

Sample : Cyanogen (C2N2) treated penicillin binding proteins from B. subtilis.

Courtesy of M.J. Simon and R.A. Day, Department of Chemistry, University of Cincinnati, Cincinnati, OH.

F/S label: 6 dansylaminopeniciline acid

Paraphrased author's commentary:

An important result is that Polaris gives baseline resolution among many of these peaks which had not been achieved with prior studies with C18 columns. Baseline resolution was seen with C4 columns, however the columns were usable for only a few cycles even if protein clean-up and prophylaxis with TFE was used. The TFE treatment applied to Polaris allowed it to be used for dozens of cycles.