

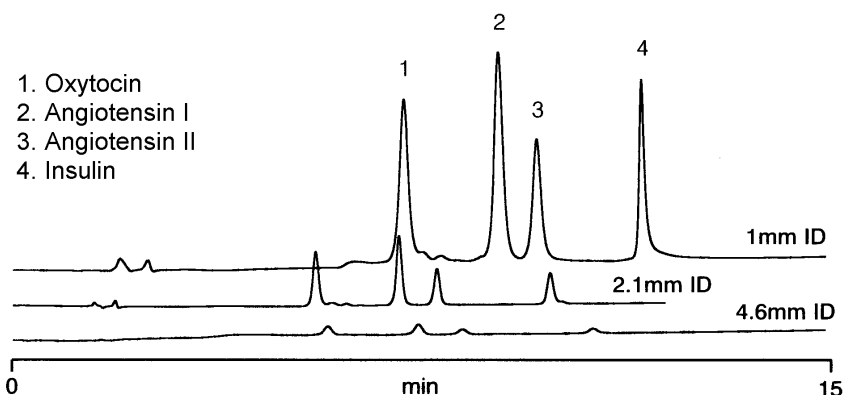
Micro-HPLC:

Reduced Column Internal Diameter - Improved Sensitivity



App No 108

Column: 5 μ PLRP-S 100Å
Dimensions: 1 x 150 mm, 2.1 x 150 mm, 4.6 x 150 mm
Mobile Phase: A: 0.1% TFA in MeCN-water (20:80)
B: 0.1% TFA in MeCN-water (50:50)
Gradient: 0-100% in 15 mins
Flow Rate: 4.6 mm: 1.0 mL/min
2.1 mm: 200 μ L/min
1.0 mm: 47 μ L/min
Detector: UV @ 220 nm



Comments:

HotSep® micro-HPLC columns offer lower detection limits (LODs) than conventional sized columns when limited sample amounts are available for analysis. The reason for this is that sample is less diluted in a narrow-bore column than in a conventional-bore column, which is beneficial when applying concentration-sensitive detectors such as UV, fluorescence and ESI-MS. Theoretically a 0.5 mm ID column gives 85x lower LOD than a 4.6 mm ID column. In many applications, the available sample amount is simply too low to be detected with a conventional HPLC instrument.