## MICROS

## How to get improved retention and peak shape for glutamine glutamic acid and aspartic acid – Tips & Suggestions

## The metal free hardware used with Cogent Diamond Hydride<sup>™</sup> column will be best to use for separation of these amino acids.

Aspartic acid and to some extent glutamic acid are sensitive to sodium in the system. Therefore, it is recommended to use the metal free, coated Cogent Diamond Hydride column, Teflon bottles for your mobile phase solvents instead of glass and to use RSA<sup>™</sup> (*reduced surface* activity) glass autosampler vials (*see link below*).

The second recommendation for optimal results is to add a small amount of TFA to the sample vial which can help peak shape. Glutamine is generally not a problem for retention or peak shape on the Cogent Diamond Hydride<sup>™</sup>.

A gradient is necessary to elute this group of compounds with a reasonable time frame and a preliminary method with starting points are described in the related articles listed below.

Click HERE for Cogent Diamond Hydride<sup>™</sup> HPLC column ordering information. Click HERE for RSA<sup>™</sup> autosampler vial, caps, inserts ordering information and pictures.



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