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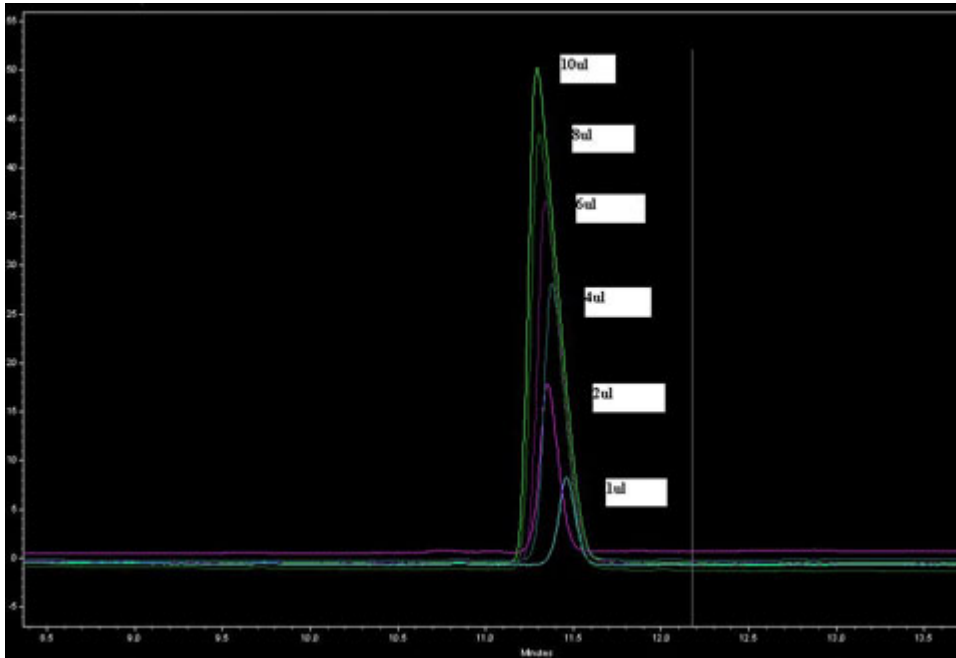
## What Effect Does High Injection Volume have on the Cogent TYPE-C HPLC Column Performance?

When using the Cogent TYPE-C™ HPLC Columns in **Aqueous Normal Phase (ANP)** mode, which is the best Mode for Hydrophilic Analytes, you should expect the same Sample Loading **Capacity** as you would expect in typical, ordinary Normal Phase HPLC or HILIC, which is not the same as what you might expect for ordinary Reversed Phase (RP) HPLC.

For this reason, when using standard 4.6mm ID analytical Columns, the Injection Volume should be kept below 5 µL if possible in order to avoid loss of Efficiency or Peak Shape Distortion.

The figure shown below illustrates the effect of different Injection Volumes in the range of 1-10 µL for a test solute using the same method. The higher Injection Volumes produce broader, Less Symmetrical Peaks.

*To get sharp, Symmetrical Peaks in this Normal Phase mode simply inject less when working in ANP.*



## Attachments

**Injection Volume Study.jpg** 58.1 Kb [Download File](#)