

## Analyte retention decreases with mobile phase water content using the Cogent Bidentate C18 HPLC column has anything happened to the column – Tech Information

There are several explanations to this phenomenon.

1. This could be due to **Aqueous Normal Phase (ANP)** mechanisms and is a unique property of Cogent TYPE-C™ line of HPLC columns. In this case the column is behaving normally.
2. If you know the column retention and separation mechanism is most likely to be Reversed Phase, then there is potentially a problem with your instrument.

Check your A and B solvents and make sure they are not switched and verify which solvent is in which reservoir. Go through the lines of each solvent and make sure they lead to the correct pump. For example, check that the lines are not switched at the degasser or going into the pump(s).

If your system uses a dual pump set-up, calculate the flow rate of each pump and make sure it is calibrated. Take a 5mL volumetric flask and time how long it takes for each solvent line to fill the flask. If one pump is not delivering accurate flow, this could be the reason.



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