

## Using two HPLC columns together in a tandem separation for polar and non polar retention - Tips & Suggestions

### Use two columns and two modes of HPLC together for excellent results.

If you connect the Cogent Bidentate C18™ & Cogent Diamond Hydride™ HPLC columns in parallel, but use the same mobile phase program on both columns, it will be difficult to have both Reversed Phase and Aqueous Normal Phase ANP HPLC modes operating simultaneously, therefore you will not get optimal results. A gradient starting at high organic may work well for the Cogent Diamond Hydride™ HPLC column but only very hydrophobic compounds will retain on the Cogent Bidentate C18™ HPLC column.

**However**, the attached poster, linked below, describes a more sophisticated system where retention of both hydrophobic and hydrophilic analytes can be retained using both columns. The set-up and procedure are described in detail.

Metabolomics studies involve not only known and predicted metabolites but also of a wide variety of ones that had not previously been predicted to exist. Due to the significant complexity of any metabolome, both the Bidentate C18™ and Diamond Hydride™ together give a much more complete picture than when used individually.

*NOTE: You need appropriate instrumentation to get the best results. Both columns are available together: [Metabolomics Kit Product Page](#)*



#### Attachment:

University of Melbourne Poster [Download File](#)