

## Fosetyl Aluminum analysis by HPLC – Tips & Suggestions

**You can start with the Cogent Bidentate C18™ column in Reversed Phase (RP) with a high % water content method.**

According to a 2014 third-party research article, if the analysis is done by Reversed Phase an ion pair agent is recommended to increase retention and reduce peak tailing. Here, 8mM sodium sulfate was used in a pH 4.3 phosphate buffer mobile phase.

Cogent TYPE-C columns work well with ion pair agents and will not be degraded. Also, the Cogent Bidentate C18™ is more hydrophobic than other C18 columns on the market due to the Cogent TYPE-C Silica™ surface. Therefore you may obtain higher retention for this highly polar analyte.

As for detection methods, it was reported that direct detection can be achieved by the addition of a KOH solution to the sample. In this case, a narrow absorbance band was observed with  $\lambda_{max}$  at 200 nm.

Indirect detection could also be used; in this case, you add a UV absorbing compound in the mobile phase and obtain a negative peak.

If you try the method by Aqueous Normal Phase ANP, we suggest the Cogent Diamond Hydride™ column. You will want to omit the ion pair agent in this case and use a high percent of acetonitrile in the mobile phase to obtain retention.

[Cogent Bidentate C18 HPLC column Ordering Information](#)

[Cogent Diamond Hydride HPLC Column Ordering Information](#)



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