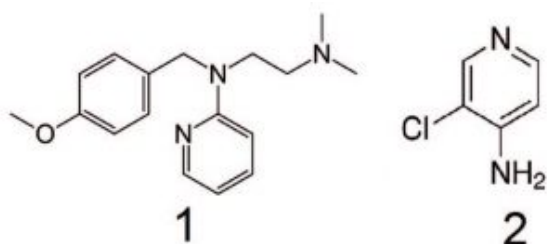
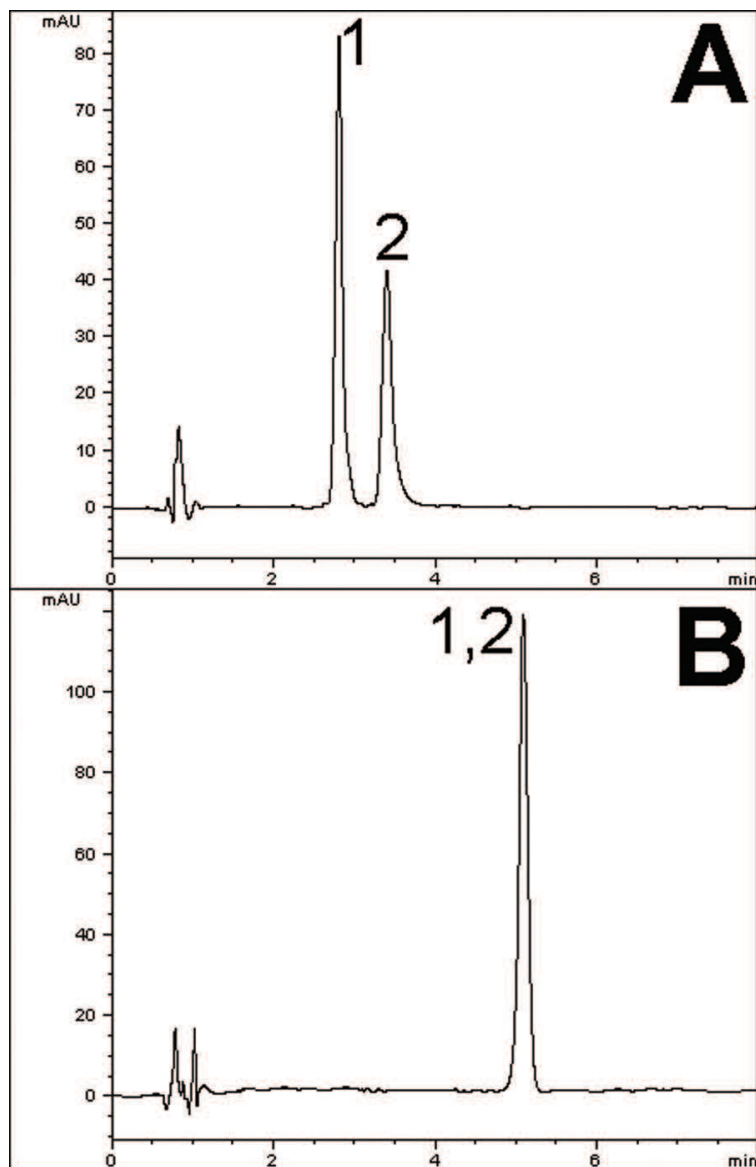


## Unique Selectivity on a Cogent Amide Stationary Phase

The Cogent Amide column offers unique selectivity that may not be readily attainable with other phases. Two test solutes shown in this application note (*Pyrilamine* and *4-Amino-3-Chloropyridine*) were baseline separated on the Cogent Amide column (*Figure A*), but they co-eluted with no resolution on a different Cogent column using otherwise equivalent method conditions (*Cogent Diamond Hydride™*, *Figure B*). The presence of the Amide ligand provides additional selectivity that can make a significant difference in resolving closely-eluting compounds such as these.



### Peaks:

1. Pyrilamine

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## 2. 4-Amino-3-Chloropyridine

**Method Conditions****Column:** Cogent Amide™, 4µm, 100Å**Catalog No.:** 40036-05P**Dimensions:** 4.6 x 50mm**Mobile Phase:**

A: 90% DI Water / 10% Acetonitrile / 0.1% Formic Acid (v/v)

B: B: Acetonitrile / 0.1% Formic Acid (v/v)

**Gradient:**

Time (Minutes)	%B
0	90
1	90
7	50
8	90

**Post Time:** 3 minutes**Flow rate:** 1.0 mL/minute**Detection:** UV 244 nm**Injection vol.:** 2µL**Sample Preparation:**

100 mg/L Pyrilamine and 4-Amino-3-Chloropyridine reference standards in diluent of 50/50 solvent A/solvent B. Peak identities confirmed with individual standards.

**Note:** Amine-containing compounds such as Pyrilamine and 4-Amino-3-Chloropyridine can be difficult to analyze using conventional silica-based stationary phases. These columns have residual silanol groups on the surface that can interact electrostatically with Amines, causing peak tailing. Chromatographers use a number of strategies to avoid these issues, such as use of ion pair agents or endcapping. However, Cogent TYPE-C Silica phases are virtually free of silanols, and therefore good peak shapes can be obtained without these workaround method strategies.

**Attachment****No 352 Pyrilamine and 4-Amino-3-Chloropyridine.pdf** 0.4 Mb [Download File](#)

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