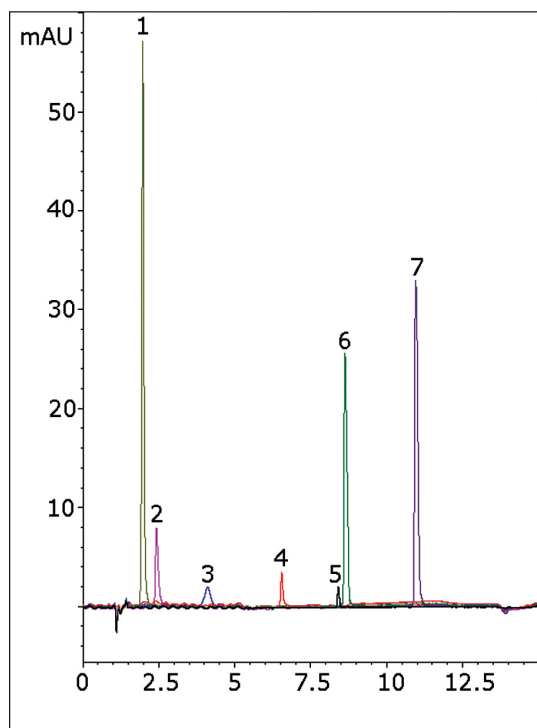


Separation of Polar Test Solutes

Excellent retention and resolution



Method Conditions

Column: **Cogent Diol™**, 4µm, 100Å

Catalog No.: 40060-15P-3

Dimensions: 3.0 x 150 mm

Mobile Phase: A: DI H₂O / 0.1% formic acid (v/v)
B: Acetonitrile / 0.1% formic acid (v/v)

Gradient:	time (min.)	%B
	0	95
	3	95
	10	40
	12	40
	13	95

Post Time: 5 min

Injection vol.: 1 µL

Flow rate: 0.7mL/min

Detection: UV 254 nm

Sample: Mixture of reference standards in diluent of 50/50 solvent A/ solvent B.

Peaks: 1. Ascorbic acid

2. Niacin

3. Riboflavin

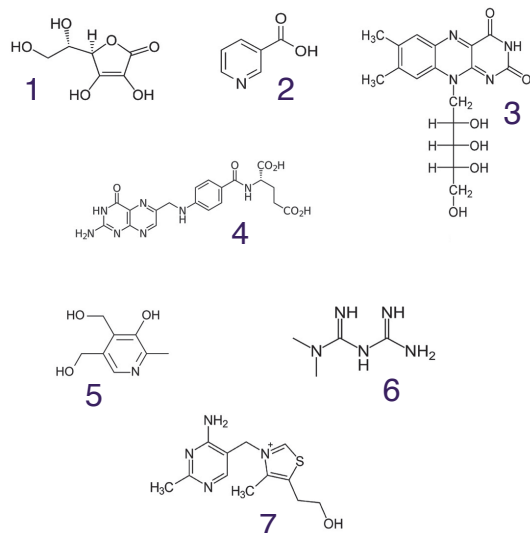
4. Folic acid

5. Pyridoxine

6. Metformin

7. Thiamine

t₀: 0.7 min



Note: B and C vitamins are hydrophilic and therefore may be difficult to retain in reversed phase methods. Metformin is a highly polar compound used for treatment of type 2 diabetes.

Discussion

The Cogent Diol column is an excellent addition to the TYPE-C™ Silica line of HPLC stationary phases. Here, a variety of common polar analytes are well-retained and separated. The peak shapes were symmetrical as well. The Cogent Diol column is well-suited to robust analysis of polar compounds such as these.