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## Study of the Behavior of Water-Soluble Vitamins in HILIC on a Diol Column

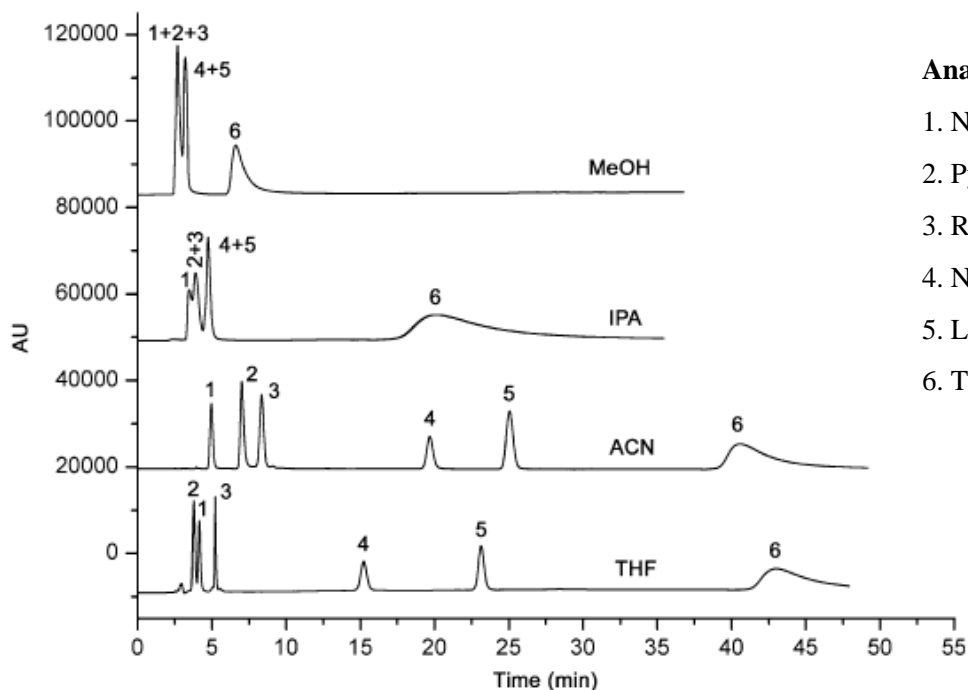
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Provided by Dr. Andreas E. Karatapanis (Laboratory of Analytical Chemistry, Department of Chemistry, University of Ioannina).

**Author name** : Andreas E. Karatapanis, et al.  
**Data source** : *Chromatographia*, 71, 751-759 (2010)  
**Year** : 2010

### Conditions

**Column** : Inertsil Hilic (5  $\mu$  m, 150 x 4.6 mm I.D.)  
**Column Cat. No.** : 5020-00735  
**Eluent** : A) organic solvents  
B) 10 mM ammonium acetate (pH 5.0) in H<sub>2</sub>O  
A/B = 90/10, v/v  
**Flow Rate** : 0.6 mL/min  
**Col. Temp.** : 25 °C  
**Detection** : UV 254, 272 nm  
**Injection Vol.** : 20  $\mu$  L  
**Sample** : Water-Soluble Vitamins



### Analyte:

1. Nicotinamide
2. Pyridoxine
3. Riboflavin
4. Nicotinic acid
5. L-Ascorbic acid
6. Thiamine

Fig. 2. Effect of organic modifier on separation of the WSV. Conditions: Inertsil diol column with 10:90 (v/v) aqueous ammonium acetate buffer (10 mM, pH 5.0) —organic solvent as mobile phase; flow rate 0.6 mL min<sup>-1</sup>; column temperature 25 °C. 1 = nicotinamide, 2 = pyridoxine, 3 = riboflavin, 4 = nicotinic acid, 5 = L-ascorbic acid, 6 = thiamine