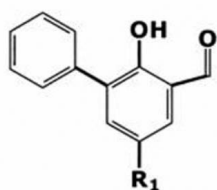
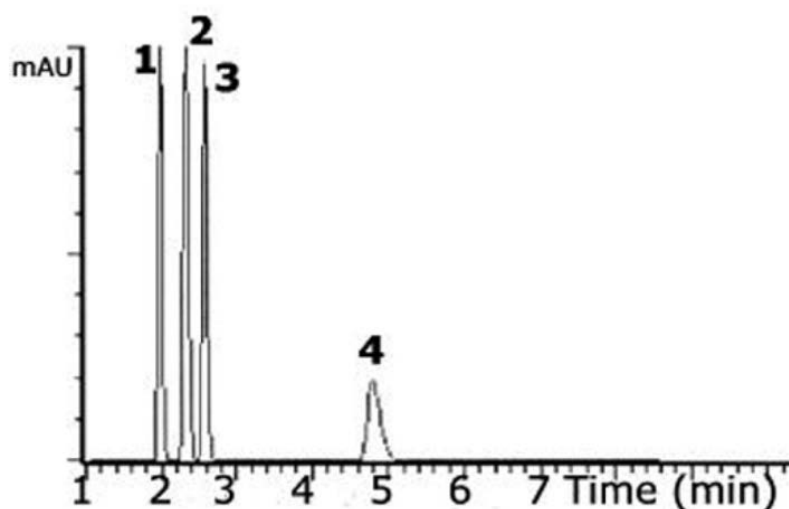


Normal Phase HPLC with a C18 Column – AppNote

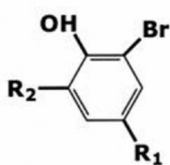
C18 Column Produces Good Chromatography with a Hexane / Ethyl Acetate Mobile Phase

A Cogent Bidentate C18 HPLC Column was used to Separate four proprietary Phenolic Compounds (precursors for a catalyst or prodrugs) under Normal Phase Conditions. The separation shown is extremely reproducible (%RSD 0.2) and the solvents do not need to be dried before use as with other Normal Phase Columns, saving Time and Lab Resources.

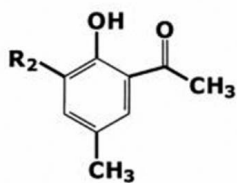
This strategy is often used when Compounds like these are Water labile. Since this Column does not have adsorbed water, it is an ideal candidate for these types of compounds when using non polar solvents.



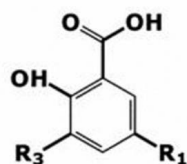
Compound 1



Compound 2



Compound 3



Compound 4

Peaks:

1. Phenolic Compound with an Aldehyde
2. Parent Phenolic Compound
3. Phenolic Compound with a Ketone
4. Phenolic Compound with an Acid Group

Method Conditions

Column: Cogent Bidentate C18™, 4µm, 100Å

Catalog No.: 40018-75P

Dimensions: 4.6 x 75mm

Mobile Phase: 95:5 Hexane / Ethyl Acetate

Injection vol.: 1µL

Flow rate: 1mL / minute

Detection: UV with a Photo Diode Array

Sample Preparation: 1mg / mL of proprietary compounds were dissolved in the Mobile Phase.

Note: This Method can also be used with Atmospheric Pressure Chemical Ionization Mass Spectrometer in the positive or negative mode: (APCI+, APCI-). Switching the Column to Normal Phase Mode required flushing 100% Methanol for 10 minutes followed by 100% Methylene Chloride for 10 minutes. This process can be repeated over and over without damage to this Column and can go back and forth between modes.



Attachment

No 06 Normal Phase HPLC with a C18 Column pdf 0.3 Mb [Download File](#)

Printed from the Chrom Resource Center

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

Date: 03-05-2024