

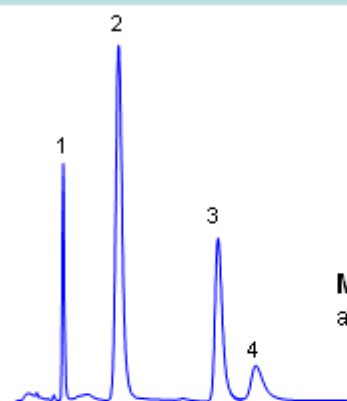
HPLC separation of Dihydroxybenzoic acid in Hydrogen-Bonding mode on SHARC 1 HPLC column

https://sielc.com/HPLC_separation_of_Dihydroxybenzoic_acid_using_Hydrogen-Bonding

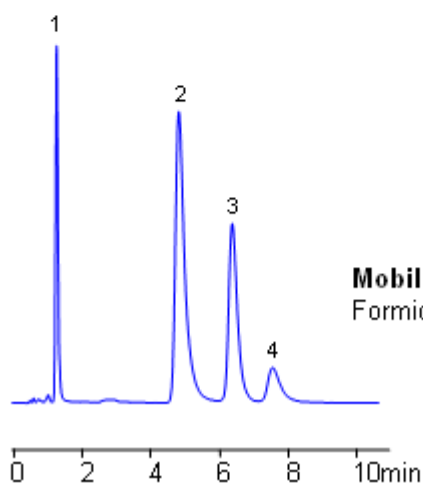
Chromatogram

Column: SHARC 1
Size: 3.2 x 100 mm
Flow: 1.0 mL/min
Detection: UV 270 nm

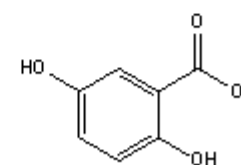
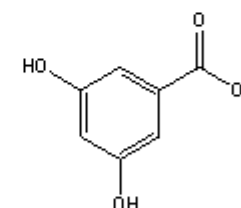
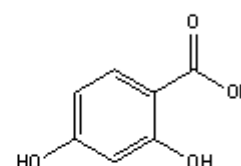
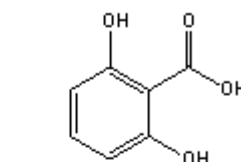
1. 2,6-Dihydroxybenzoic acid
2. 2,4-Dihydroxybenzoic acid
3. 3,5-Dihydroxybenzoic acid
4. 2,5-Dihydroxybenzoic acid



Mobile phase: MeCN 100% with 0.5% Formic acid with 0.05% AmFm



Mobile phase: MeCN/MeOH 98/2 with 0.2% Formic acid with 0.02% AmFm



Description

Application Notes: Dihydroxybenzoic acids are polar acidic compounds containing two hydroxyl groups as well as a carboxylic acid. Isomers of dihydroxybenzoic acids are very polar with varying degrees of acidity. While the isomers can be analyzed by mixed-mode chromatography on Primesep D column, the presence of hydroxyls and carboxylic acid fragments also make these compounds good candidates for using the new hydrogen bonding columns for analysis. Since all these compounds have the same amount of hydroxyls they are separated based on accessibility of this hydroxyl group. Retention time can be adjusted by the amount of ACN, MeOH and concentration of additives (formic acid, ammonium formate, triethylamine, etc.). Our method is fully compatible with LC/MS and prep chromatography and can be used for other hydroxy and carboxylic acids containing compounds..

Application Columns: SHARC 1, 3.2x100 mm, 5 µm, 100Å. To learn more about SHARC 1 columns click here . To order this column click here . To see more chromatographic separations check our web site.

Application Compounds: 2,6-dihydroxybenzoic acid, 2,4-dihydroxybenzoic acid, 3,5-dihydroxybenzoic acid, 2,5-dihydroxybenzoic acid

Detection Technique: UV, LC/MS

Method Parameters

Mobile Phase	MeCN/MeOH
Buffer	AmFm, Formic acid
Flow Rate	1.0 ml/min
Detection	UV, 270 nm
Class of Compounds	Drug, Acid, Hydrophilic, Ionizable, Vitamin, Supplements
Analyzing Compounds	2,6-dihydroxybenzoic acid, 2,4-dihydroxybenzoic acid, 3,5-dihydroxybenzoic acid, 2,5-dihydroxybenzoic acid

HPLC Column Used

Sharc 1, 3.2×100 mm, 5 µm, 100A

[Order this column at hplc-shop.de](http://hplc-shop.de) →