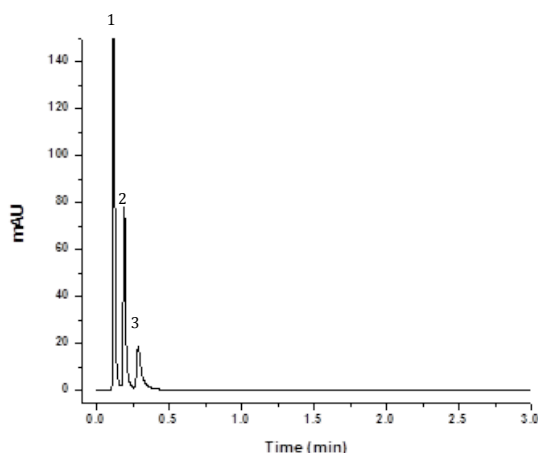


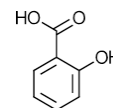
FLARE HILIC Column: Separation of Hydroxybenzoic Acids

HPLC Conditions

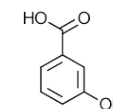
Column Name:	FLARE HILIC (Amino-Diol)
Column Dimensions:	4.6 x 33mm, 3.6 μ m, 180 \AA (FH1090-2)
HPLC System:	Agilent 1260
Injection Volume:	1.0 μ l
Detection:	UV at 280nm
Flow Rate:	2.0ml/min
Mobile Phase:	A: 900mL ACN + 100mL Water B: 1L ACN + 1mL Tetramethylammonium hydroxide solution (25% w/w in MeOH); A/B = 50/50 (v/v)
Temperature:	45 $^{\circ}$ C
Analytes:	1. 2-hydroxybenzoic acid 2. 3-hydroxybenzoic acid 3. 4-hydroxybenzoic acid



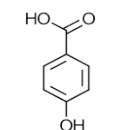
2. 2-hydroxybenzoic acid



1. 3-hydroxybenzoic acid



3. 4-hydroxybenzoic acid



Notes

Phenolic acids occur as universal plant components bound to lignins by ester linkages and play the role of inhibitors of cellulase secreted by pathogens across cell membranes. They prevent the penetration of pathogens across the cell membrane. Many phenolic acids are found in food products e.g. wines. 2-hydroxybenzoic acid also known as salicylic acid is used as a major component of various medications.

References

1. www.wikipedia.org
2. Monika Waksmundzka-Hajnos, Chromatographic Separations of Aromatic Carboxylic Acids, *Journal of Chromatography B*, 717 (1998) 93-118
3. E.F. Gris et al., Phenolic Profile and Effect of Regular Consumption of Brazilian Red Wines on in-vivo Antioxidant Activity, *Journal of Food Composition and Analysis* 31 (2013) 31-40