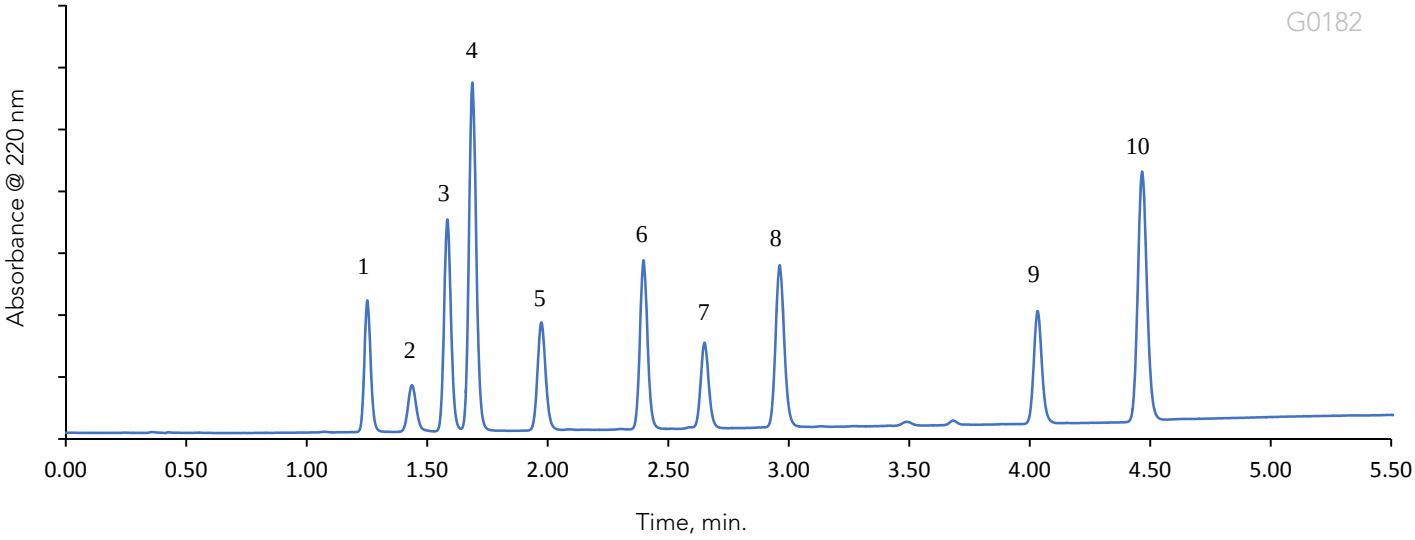
HALO® | Fused-Core® Particle Technology

Application Note: 188-P

Separation of Phenolic Acids on HALO® 90 Å RPA, 2.7 µm



TEST CONDITIONS:

Columns: HALO 90 Å RPA, 2.7 µm, 2.1 x 100 mm
Part Number: 92812-607
Mobile Phase A: 20mM Phosphoric Acid
Mobile Phase B: Methanol
Gradient:

Time	%B
0.00	25
5.00	60
5.50	60

Flow Rate: 0.5 mL/min
Initial Pressure: 345 bar
Temperature: 35°C
Detection: UV 220 nm, PDA
Injection Volume: 0.7 µL
Sample Solvent: Methanol
Data Rate: 40 Hz
Response Time: 0.025 sec.
Flow Cell: 1 µL
LC System: Shimadzu Nexera X2
Structures on page 2

PEAK IDENTITIES:

1. Homovanillic acid
2. Caffeic acid
3. Syringic acid
4. Vanillic acid
5. Chlorogenic acid
6. Sinapic acid
7. Ferulic acid
8. *p*-Coumaric acid
9. *trans*-Cinnamic acid
10. Resveratrol

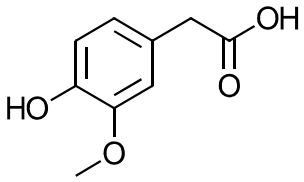
Phenolic acids can be found in many plant-based foods and beverages. Fruits, vegetables, and even olive oils all contain different varieties of these acids. For example, sinapic acid can be found in wine and caffeic acid can be found in coffee, cabbage, and apples. These compounds have antioxidant, anti-inflammatory, and antimicrobial properties so they can be effective against skin disorders. They also affect the flavors of the food or oil. A separation of ten phenolic acids is completed on a HALO® 90 Å RPA, 2.7 µm column with excellent speed and resolution.

advancedmaterialstechnology
www.advanced-materials-tech.com

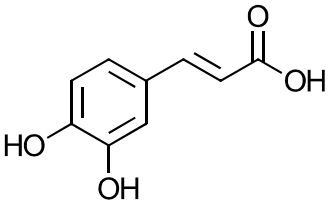
FOR MORE INFORMATION OR TO PLACE AN ORDER, CONTACT:

Application Note: 188-P

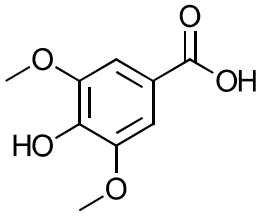
Structures of Phenolic Acids



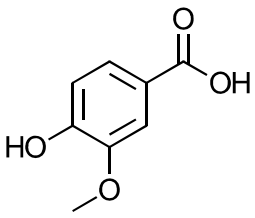
Homovanillic acid



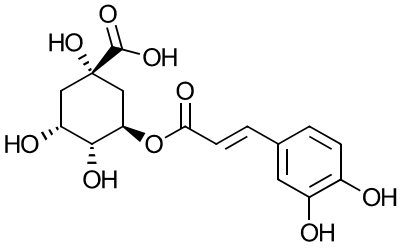
Caffeic acid



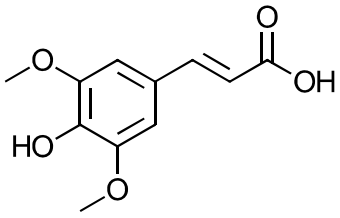
Syringic acid



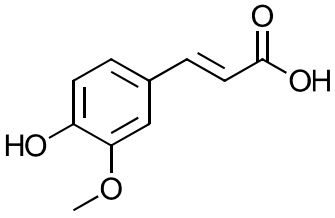
Vanillic acid



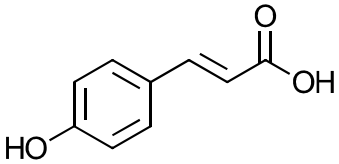
Chlorogenic acid



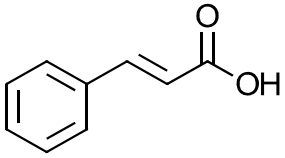
Sinapic acid



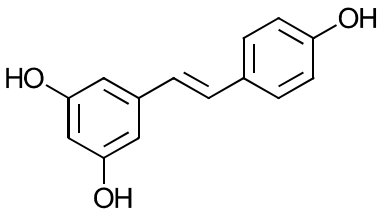
Ferulic acid



p-Coumaric acid



trans-Cinnamic acid



Resveratrol

FOR MORE INFORMATION OR TO PLACE AN ORDER, CONTACT: