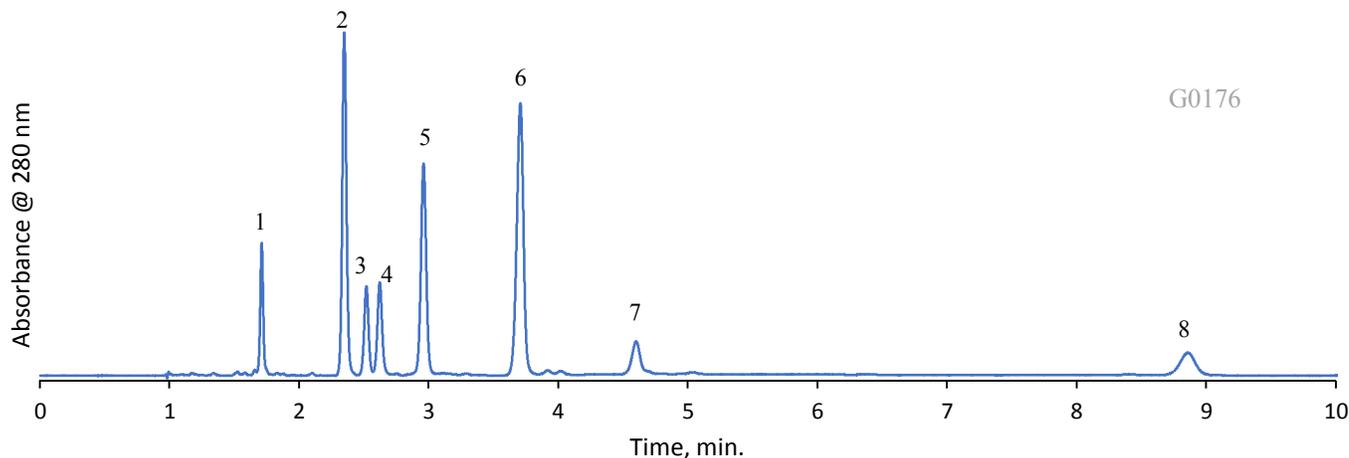


Separation of Fat Soluble Vitamins on HALO® C30



TEST CONDITIONS:

Column: HALO 160 Å C30, 2.7 µm, 4.6 x 150 mm
Part Number: 92114-730

Isocratic: 100% Methanol

Flow Rate: 1.5 mL/min

Pressure: 262 bar

Temperature: 30°C

Detection: UV 280 nm, PDA

Injection Volume: 2.0 µL

Sample Solvent: Methanol

Data Rate: 40 Hz

Response Time: 0.025 sec.

Flow Cell: 1 µL

LC System: Shimadzu Nexera X2

PEAK IDENTITIES:

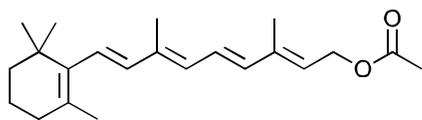
1. Retinyl acetate (A)
2. Delta tocopherol (E)
3. Ergocalciferol (D2)
4. Cholecalciferol (D3)
5. Alpha tocopherol (E)
6. DL-alpha-tocopherol acetate (E)
7. 2,3-trans-phyloquinone (K)
8. Retinyl palmitate (A)

CONCENTRATION:

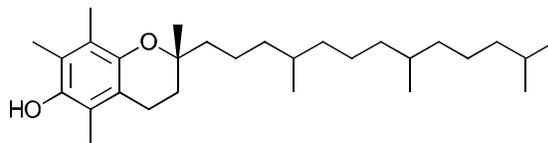
- | |
|------------|
| 0.15 mg/mL |
| 0.08 mg/mL |
| 0.31 mg/mL |
| 0.15 mg/mL |

Fat soluble vitamins are stored in the liver and fatty tissue. These vitamins are essential to good health and contribute to several physiological functions, including bone growth, immune system regulation, cell division, and blood clotting. Vitamin E acts as an antioxidant. HALO® C30 enables a fast, efficient separation of a typical fat soluble vitamin panel in less than 9 minutes, while maintaining baseline resolution between vitamins D2 and D3.

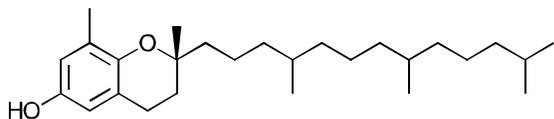
Fat Soluble Vitamin Structures



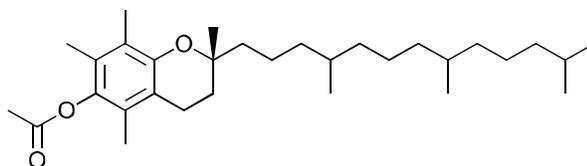
Retinyl acetate (A)



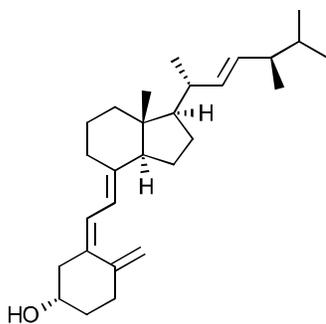
Alpha tocopherol (E)



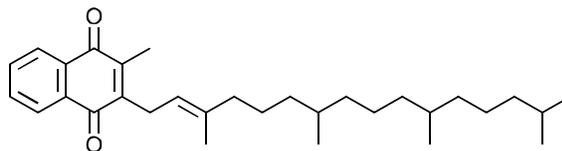
Delta tocopherol (E)



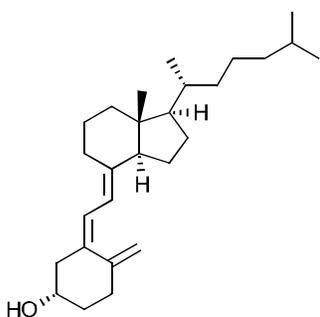
DL-alpha-tocopherol acetate (E)



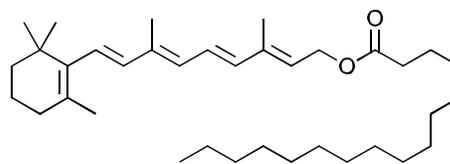
Ergocalciferol (D2)



2,3-trans-phyloquinone (K)



Cholecalciferol (D3)



Retinyl palmitate (A)