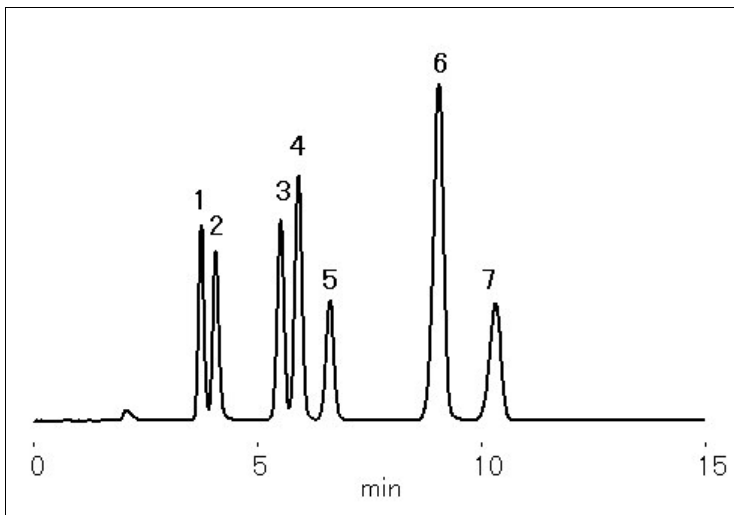


Simultaneous Analysis of Vitamin E Homologs

Naturally occurring Vitamin E is classified into two categories: tocopherols and tocotrienols, each containing four subcategories, and therefore amounting to a total of eight homologs. Tocopherols exhibit a higher bioactivity, the most active type being α -tocopherol, and for this reason the term vitamin E generally refers to α -tocopherol. In this application, seven kinds of tocotrienols and tocopherols except β -tocopherol were analyzed simultaneously using Silica 5SIL 4D (a column for normal phased chromatography).



Sample : Vitamin E, 20 μ L

1. α -Tocopherol 5 μ g/mL
2. α -Tocotrienol 10 μ g/mL
3. β -Tocopherol 5 μ g/mL
4. γ -Tocopherol 5 μ g/mL
5. γ -Tocotrienol 10 μ g/mL
6. δ -Tocopherol 5 μ g/mL
7. δ -Tocotrienol 10 μ g/mL

Column : Shodex Silica 5SIL 4D (4.6mmI.D. x 150mm)
Eluent : n-Hexane/Isopropanol/CH₃COOH=1000/6/5
Flow rate : 1.0mL/min
Detector : Fluorescence (Ex. 298nm, Em. 325nm)
Column temp. : 30°C