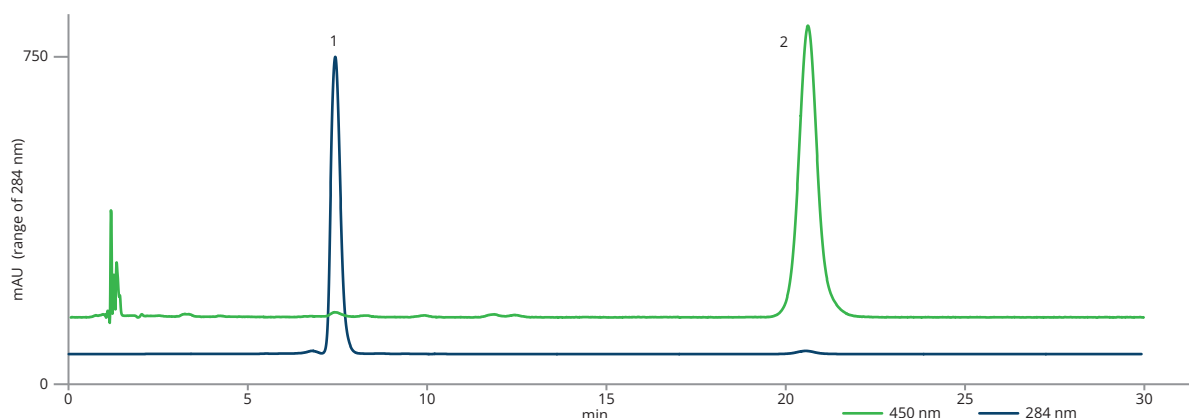


Vitamin E and provitamin A in food supplements

Beta-carotene is one of the group of carotenoids. It is a precursor of Vitamin A and plays a significant role as an antioxidant. Alpha-tocopherol is a type of Vitamin E. This application shows the separation of both compounds in a sample of a food supplement.

Substance

beta-Carotene, CAS Number 7235-40-7
alpha-Tocopherol (E307), CAS Number 59-02-9



Tablet analysis on ASTRA® column

| | |
|-------------------------|---|
| Column | ASTRA® C18-HE, 5 µm |
| Dimensions | 100 m × 4.6 mm |
| Part number | AST-5732-LI46 |
| Mobile phase | A: Acetonitrile B: Methanol Isocratic elution 70:30 – A:B (v/v) |
| Flow rate | 1.5 ml/min |
| Temperature | 60 °C |
| Detection | UV/VIS @284 nm (alpha-tocopherol), 450 nm (beta-carotene) |
| Injection volume | 30 µl |
| Analytes | 1. Alfa-tocopherol (Vitamin E α) 2. Beta-carotene (Provitamin A) |