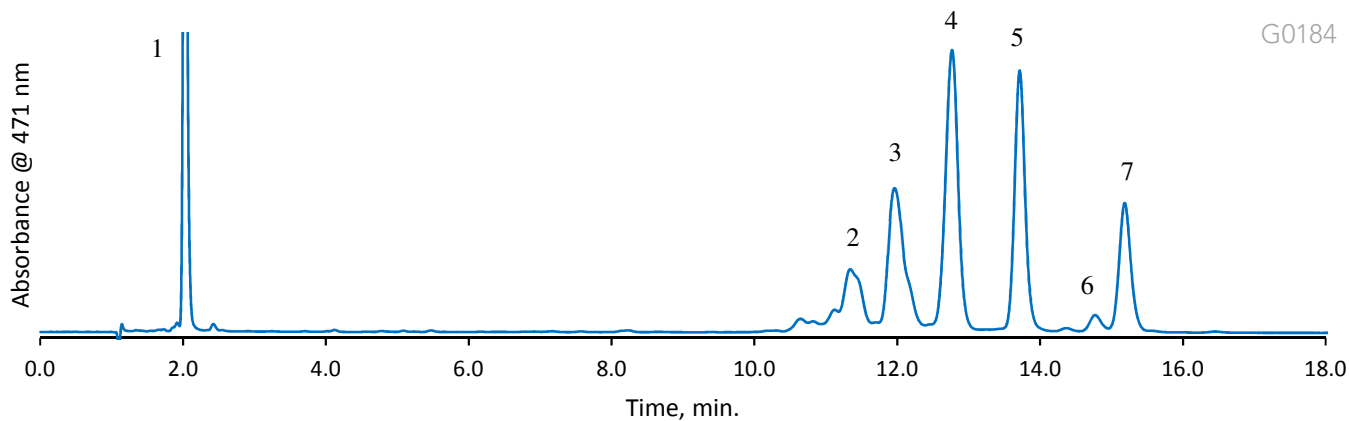


Separation of Carotenoids on HALO® C30



TEST CONDITIONS:

Columns: HALO 160 Å C30, 2.7 µm, 3.0 x 150mm
Part Number: 92113-730

Mobile Phase A: Methanol

Mobile Phase B: Ethanol

Gradient:

Time	% B
0.0	0
20.0	40

Flow Rate: 0.65 mL/min

Temperature: 38°C

Detection: UV 471 nm, PDA

Injection Volume: 0.6 µL

Data Rate: 2.5 Hz

Response Time: 2 sec.

Flow Cell: 13 µL

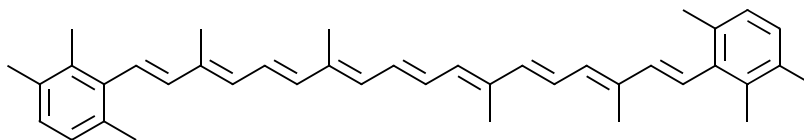
LC System: Agilent 1100

Data Courtesy of Nature's Sunshine Products

PEAK IDENTITIES:

1. Lutein
2. *cis*- carotenoid 1
3. *cis*- carotenoid 2
4. α- Carotene
5. β- Carotene
6. *cis*- Lycopene
7. Lycopene

STRUCTURE:



-General structure of a carotenoid

Carotenoids can be split into two main classes called xanthophylls and carotenes. They are responsible for absorbing light for photosynthesis and protecting chlorophyll from photodamage. A separation done by Nature's Sunshine Products shows excellent resolution of carotenoids on a HALO® C30 column.