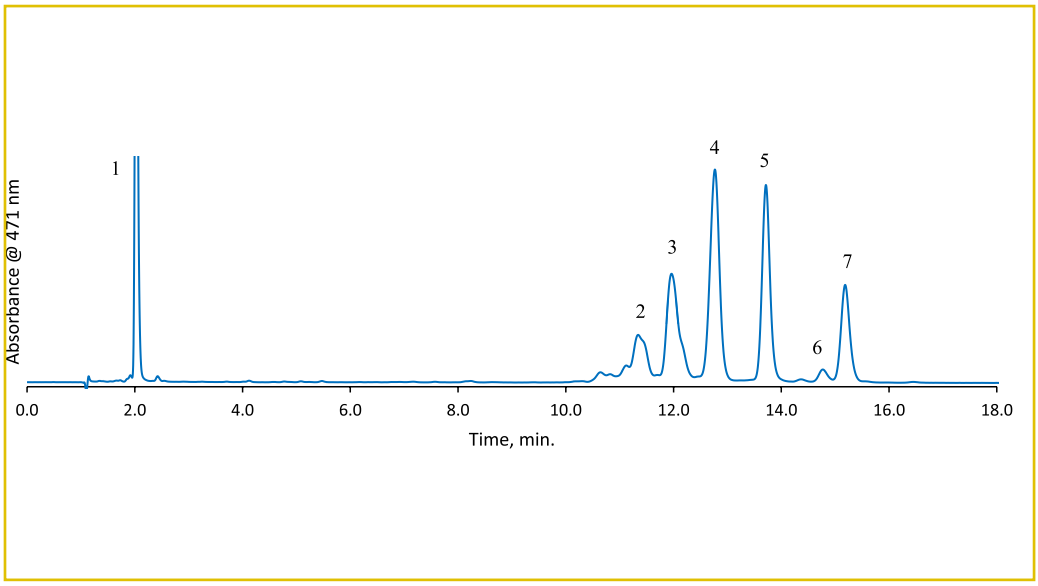
HALO®

FOOD / BEVERAGE

Separation of Carotenoids on HALO® C30

Application Note 191-V



PEAK IDENTITIES:

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

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.

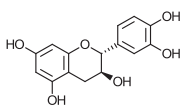
TEST CONDITIONS:

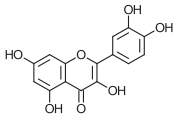
Column: HALO 160 Å C30, 2.7 µm, 3.0 x 150 mm
Part Number: 92113-730
Mobile Phase:
A: Methanol
B: Ethanol
Gradient:

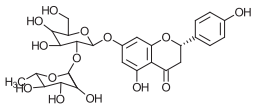
Time (min)	% B
0.0	0
20.0	40

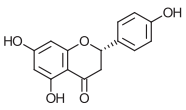
Flow Rate: 0.65 mL/min
Temperature: 38 °C
Detection: UV 471 nm, PDA
Injection Volume: 0.6 µL
Response Time: 2.0 sec
Data Rate: 2.5 Hz
Flow Cell: 13 µL
LC System: Agilent 1100
Data Courtesy of Nature's Sunshine Products

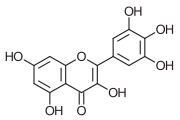
STRUCTURES:

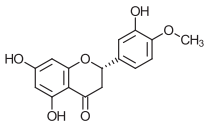

Catechin


Quercetin


Naringin


Naringenin


Myricetin


Hesperetin