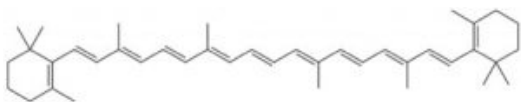
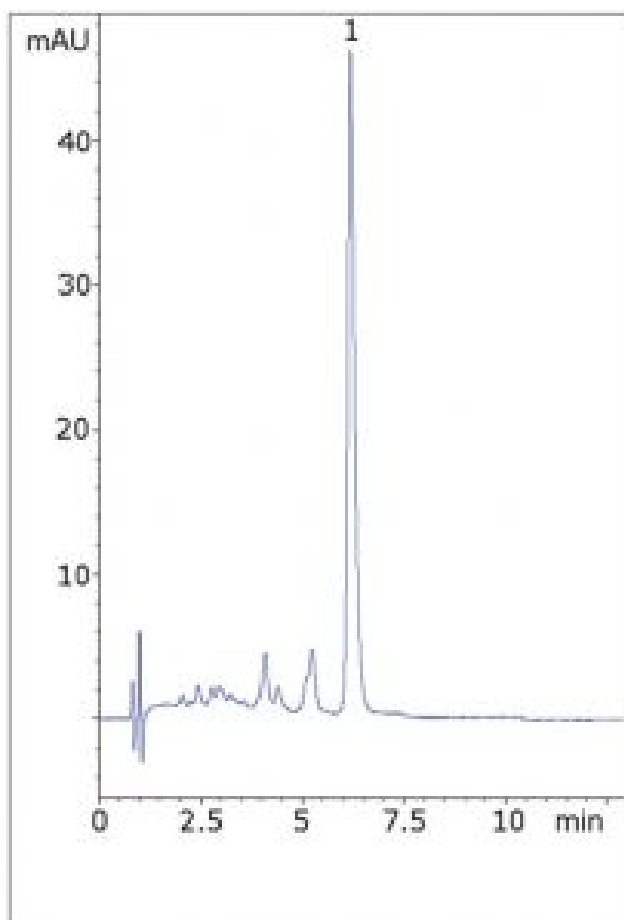


## β-Carotene Capsule Analyzed with HPLC – AppNote

### Separation from Matrix Peaks

Click [HERE](#) for Column Ordering Information.

Beta-carotene may be taken as a dietary supplement in capsule form. In this case, a wide variety of Matrix Peaks were observed in the chromatographic data. It is possible that some of these peaks are various isomers of all-trans β-carotene or other similar carotenes. In any case, resolution was obtained from the other Matrix Peaks, which allows for accurate quantitation of β-carotene in the capsule.



**Peak:**

β-Carotene

### Method Conditions

**Column:** Cogent Phenyl Hydride™, 4μm, 100Å

**Catalog No.:** 69020-7.5P

**Dimensions:** 4.6 x 75 mm

**Mobile Phase:**

A: DI Water / 0.1% Formic Acid (v/v)

B: Acetonitrile / 0.1% Formic Acid (v/v)

**Gradient:**

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0  
7  
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9  
0  
6  
0  
7  
0

**Post Time:** 3 minutes

**Injection vol.:** 10µL

**Flow rate:** 1.0 mL / minute

**Detection:** UV @ 452 nm

**Sample Preparation:** A Beta-carotene capsule was opened and the contents were transferred to a 25mL volumetric flask containing a portion of Methanol. The solution was sonicated 15 minutes and diluted to mark with Methanol. After mixing, a portion was filtered with a 0.45µm Nylon Syringe Filter (MicroSolv Tech Corp.).

**t<sub>0</sub>:** 0.9 minutes

**Note:** Beta-carotene is found in many fruits and vegetables. It is responsible for the orange color in carrots, pumpkins, sweet potatoes, and others. In terms of nutrition, Beta-carotene is a metabolic precursor to Vitamin A.



**Attachment**

**No 269 B-Carotene Capsule pdf** 0.3 Mb [Download File](#)

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