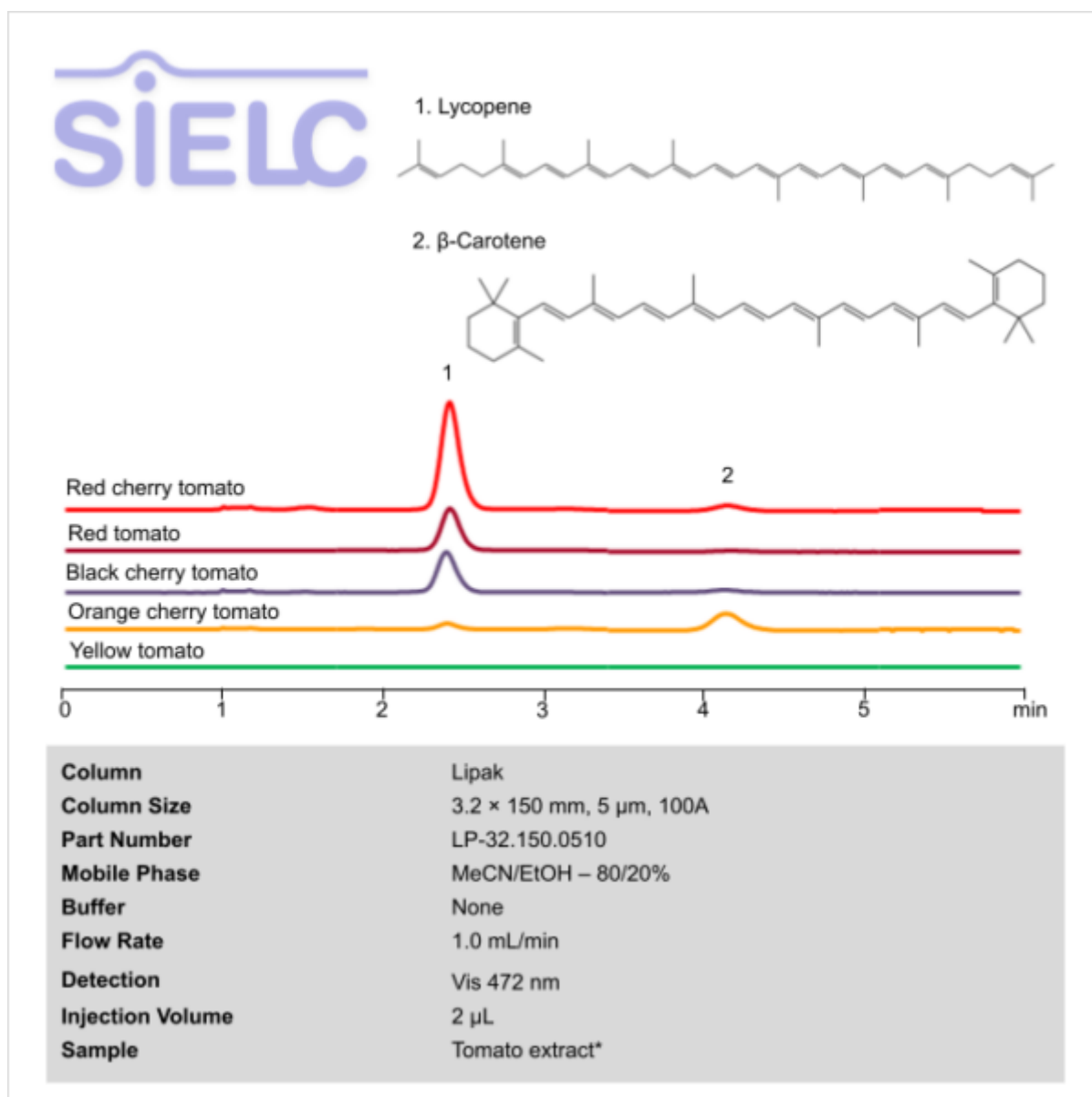


HPLC Method for Analysis of Lycopene and β -Carotene in Tomatoes on Lipak Column

<https://sielc.com/hplc-method-for-analysis-of-lycopene-and-beta-carotene>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Lycopene , beta-Carotene .

Lycopene is a carotenoid hydrocarbon with C₄₀ H₅₆ molecular formula. It is found primarily in tomatoes, watermelon, grapefruits, and red guavas. Gac has the highest concentration of lycopene at 2~6 per gram. Lycopene is non-toxic, but can be a rare allergen. You can find detailed UV spectra of Lycopene and information about its various lambda maxima by visiting the following link.

beta-Carotene , also written as β -Carotene , is a pigment with the chemical formula C₄₀ H₅₆ . It is found primarily in fungi, plants, and fruit. Especially high amounts of it are found in carrots, pumpkins, spinach, and sweet potatoes. In dietary contexts, it is used as a pro-vitamin, as it converts to retinol in the body. In fact, it is the worldwide primary dietary source of provitamin A and is the best known provitamin a carotenoid. You can find detailed UV spectra of beta-Carotene and information about its various lambda maxima by visiting the following link.

* Lycopene and β – Carotene Extraction from Tomato · Weigh 5.0 g of homogenized tomato sample into a centrifuge tube. · Add 10.0 mL of hexane/acetone (3:1, v/v).

Mix the sample using an ika ultra turrax tube drive until or an equivalent tube homogenizer/mixer until the sample is thoroughly homogenized and extracted.

Method Parameters

Mobile Phase	MeCN/EtOH – 80/20%
Buffer	None
Flow Rate	1.0 ml/min
Detection	Vis 472 nm
Class of Compounds	Pigment
Analyzing Compounds	Lycopene,beta-Carotene

HPLC Column Used

Lipak, 3.2 x 150 mm, 5 μ m, 100 A, dual ended

[Order this column at hplc-shop.de →](http://hplc-shop.de)