

Which HPLC Column Do You Suggest for Analysis of Carotene or Lycopene - FAQ

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The best option would be either the Cogent C30™ or the Cogent UDC-Cholesterol™

With these types of compounds, the main challenge will be separating the different isomers. There are numerous double bonds in the molecules, and many combinations of *cis/trans* isomers are likely to be encountered. Because the isomers differ little in hydrophobicity but significantly in shape, a column with shape-selective capabilities would be required for an adequate separation.

Reversed phase selectivity alone, such as from a C8 phase, is generally insufficient. One column with shape selective behavior is the Cogent C30™. The C30 chains will become more rigid at lower temperatures, and therefore selectivity of isomers is predicted to increase at decreasing temperature.

The same principle will apply for the Cogent UDC-Cholesterol™, which also adopts a more rigid conformation at lower temperatures. Hence, temperature will be an important parameter to investigate in method development and the column should always be thermostatted to ensure robustness.

- [Cogent C30 HPLC Column Ordering Information](#)
- [Cogent UDC-Cholesterol HPLC Column Ordering Information](#)

