ISAspher C30-CXT XELA

Carotenoides
Xanthophylls
Tetraterpenes



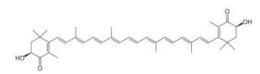


First choice for (U)HPLC analysis of carotenoid isomers, polyaromatic hydrocarbons, lipids and related substances.

## ISAspher / XELA C30-CXT



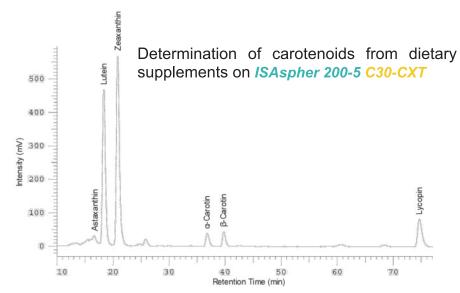
Carotenoids in form of nonpolar carotenes and oxy-substituted xanthophylls as well as tetraterpenes in general can be found in several natural sources like fruits and vegetables. Because of their health promoting properties these compounds are also used as food supplements.



ISAspher C30-CXT HPLC columns and XELA C30-CXT UHPLC columns were especially developed for the separation of geometric isomers (cis/trans isomers). Subtle molecular differences in geometrical shapes are recognized by the structure of the nonpolar C30 phase and isomers are resolved. (Shape Selectivity)

X-----X

The C-30 phase is more hydrophobic compared to classical C18 stationary phases. Even with eluents of high organic content, most compounds are retained. Gradients from methanol, tert.-butylmethylether (MTBE) and water have proven to be effective eluents. Lit.



## Determination of Carotenoids in Food, Synthetical Products and Medical Samples Separation of Long-Chained Isomers

**High Hydrophobicity and Structure Recognition** 

Because of their unique selectivity *ISAspher* and *XELA C30-CXT* columns can also be used successfully for further fileds of application. Their speicial properties particularly take effect with polyaromatic hydrocarbons (PAH), vitamins, phospholipids, unsaturated fatty acids and similar compound classes and lead to significant differences compared to common C18 columns.

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Lit: Sander, L.C. and S.A. Wise; J. Chromatogr. 1993, 656, 335-351; Sander, L.C. et al.; Anal. Chem. 1994, 66, 1667-1674