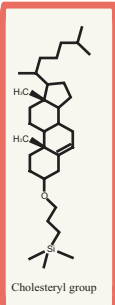


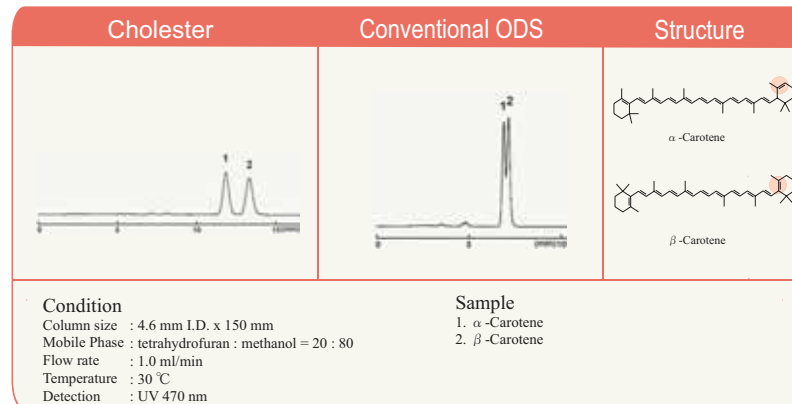
Evaluation of Novel Cholesterol-Based Stationary Phase for the Separation of Natural Compounds

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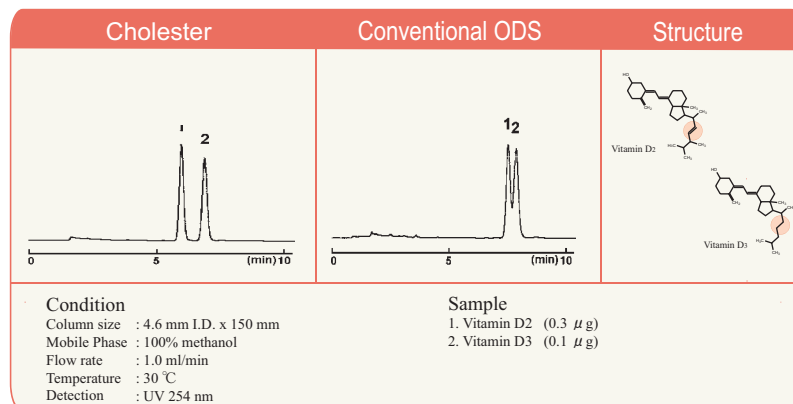


Abstract:
 The chromatographic analysis of dietary supplements and natural products is often very challenging due to the similarity of many of the analytes in the samples. Many classes of compounds in natural products contain geometric or positional isomers that may be difficult to separate using traditional reversed-phase HPLC columns. A novel cholesterol-based stationary phase has been developed that can help resolve these types of compounds. Several applications demonstrating the separation of closely related compounds in natural products and vitamins are presented.

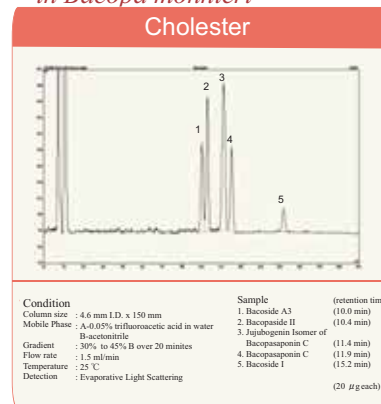
► Structural Isomers Like Carotenes ◀



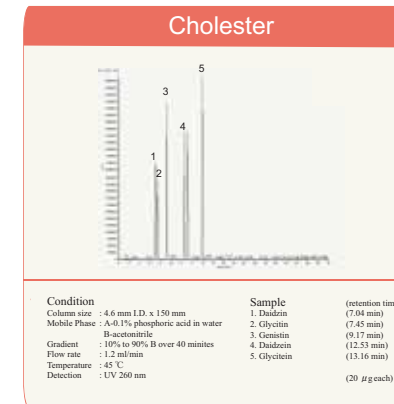
► Steroids Like D Vitamins ◀



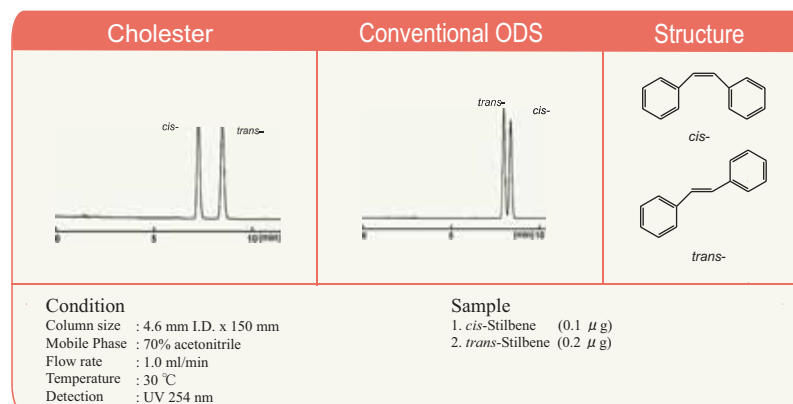
► Bacopasides in Bacopa monnieri ◀



► Soy Isoflavones ◀



► Diastereomers Like Stilbens ◀



Conclusion:

The COSMOSIL Cholester is a useful column for the development of HPLC methods for dietary supplements and natural products. It can often be used as a direct replacement for traditional C₁₈ stationary phases, exhibiting slightly greater retention of many compounds. In addition, the COSMOSIL Cholester column can provide improved selectivity for closely related compounds compared with C₁₈ stationary phases, particularly with geometrical or positional isomers.