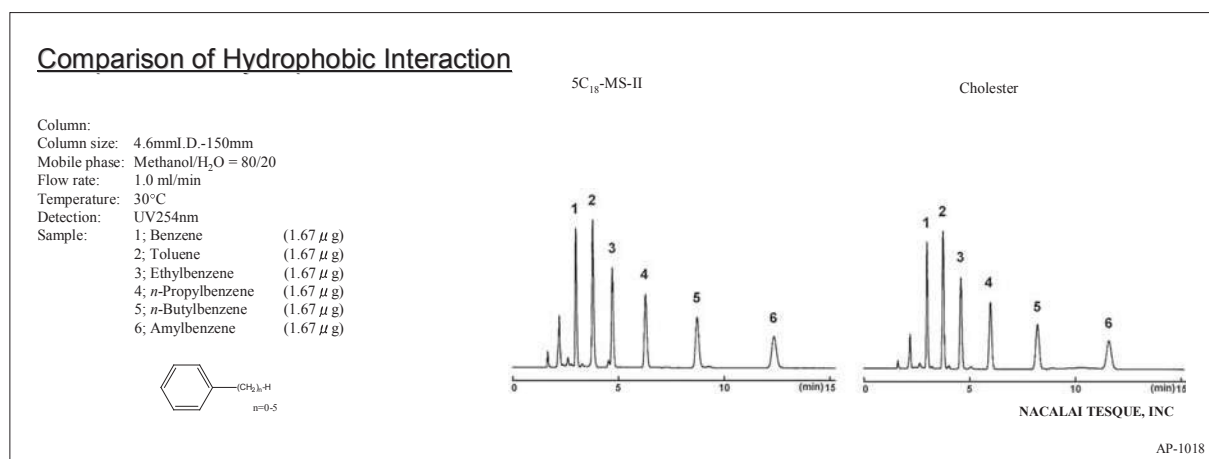


COSMOSIL Cholester

- Cholesterol bonded stationary phase
- Usable under condition the same as C₁₈
- Increased stereoselectivity and improved resolution for geometric isomers
- For separation of natural compounds

Hydrophobic Interaction

Figure shows the comparison of hydrophobic interactions with competitive C₁₈ columns. Cholester provides the same hydrophobicity as alkyl group bonded types (C₁₈, C₃₀). It is not necessary to change the analytical conditions when replacing C₁₈ or C₃₀ columns with Cholester.



Molecular Shape Selectivity

The stationary phase of Cholester has very rigid structures and can distinguish different molecular shapes. Cholester offers improved separation for structurally similar compounds that are difficult to analyze with alkyl group bonded materials (C₁₈ and C₃₀). As in the following example Cholester retains planar Triphenylene longer than stereoscopic *o*-Terphenyl.

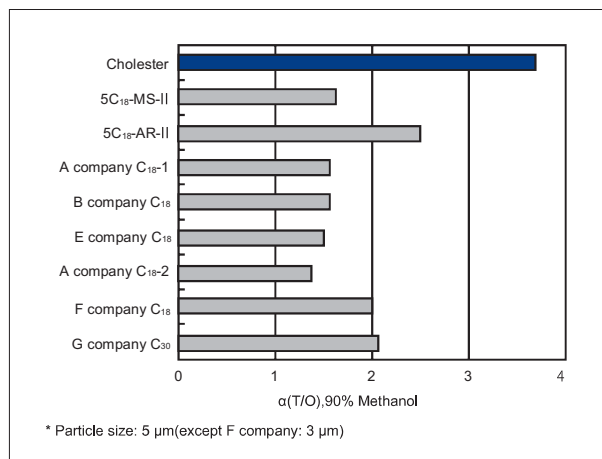
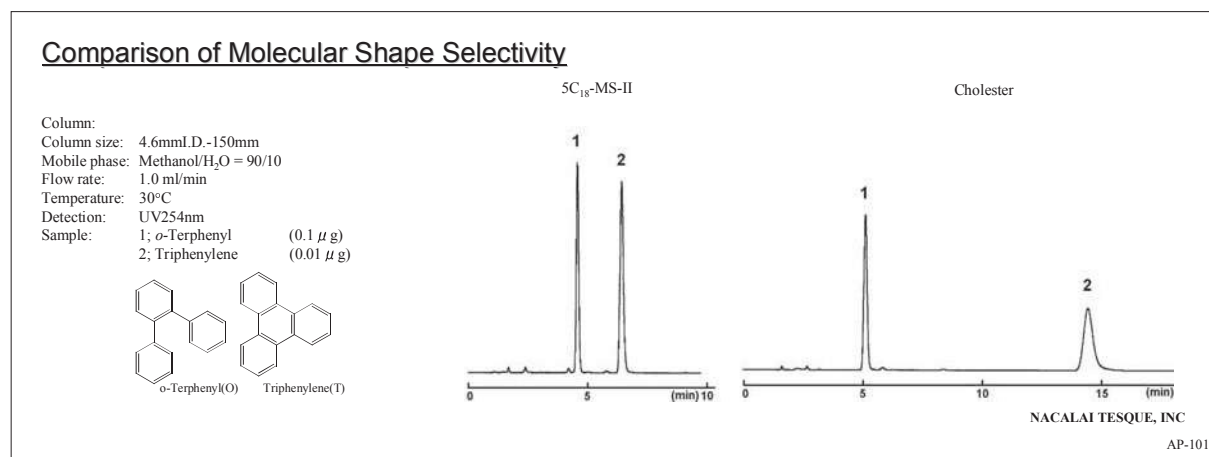


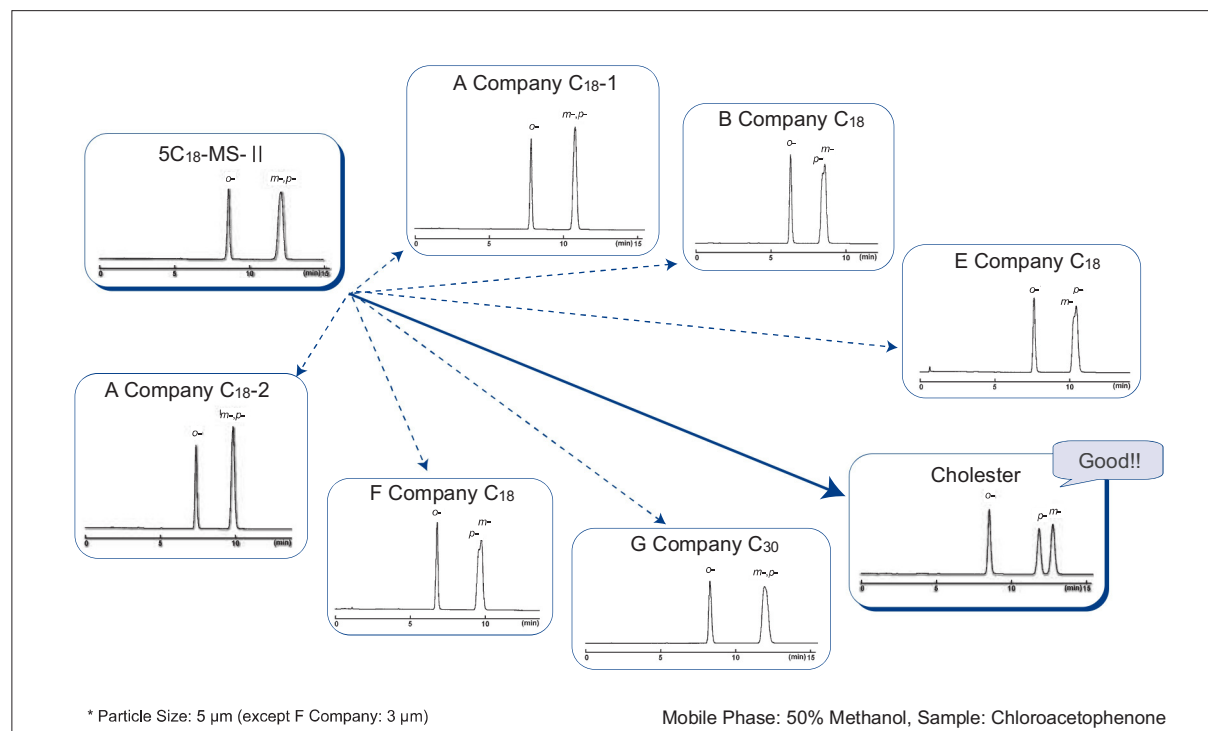
Figure. Comparison of molecular sharp selectivity



Improvement in Separation

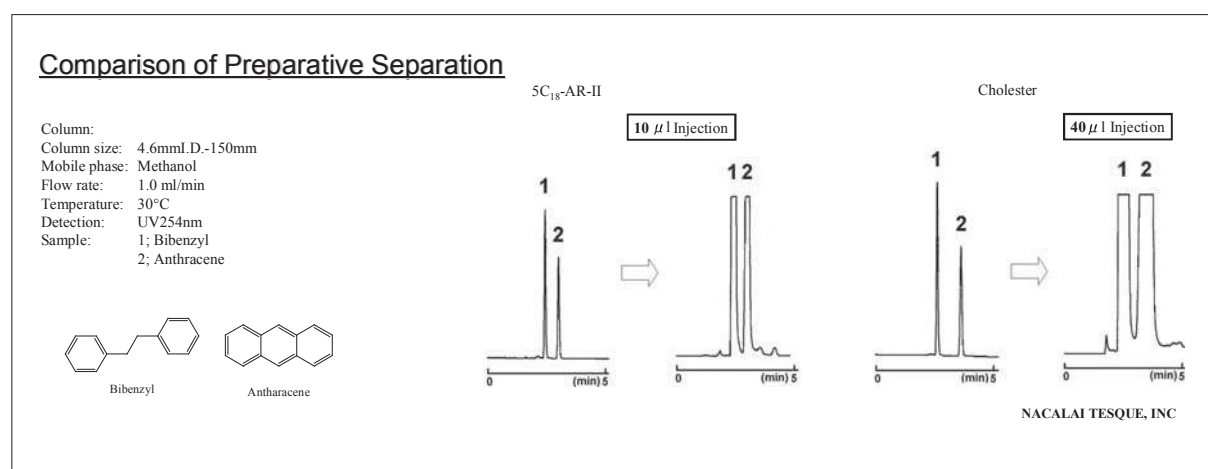
COSMOSIL Cholester provides enhanced selectivity over traditional C₁₈ columns and offers greater performance in separating isomers or other closely related compounds. COSMOSIL Cholester is ideal for method development and serves as an excellent alternative to traditional C₁₈ columns. The figure below shows analytical data of chloroacetophenone isomers. These isomers are difficult to separate with C₁₈ and C₃₀, but they are well resolved by COSMOSIL Cholester.

Comparison with Competitors' C₁₈ and C₃₀ columns



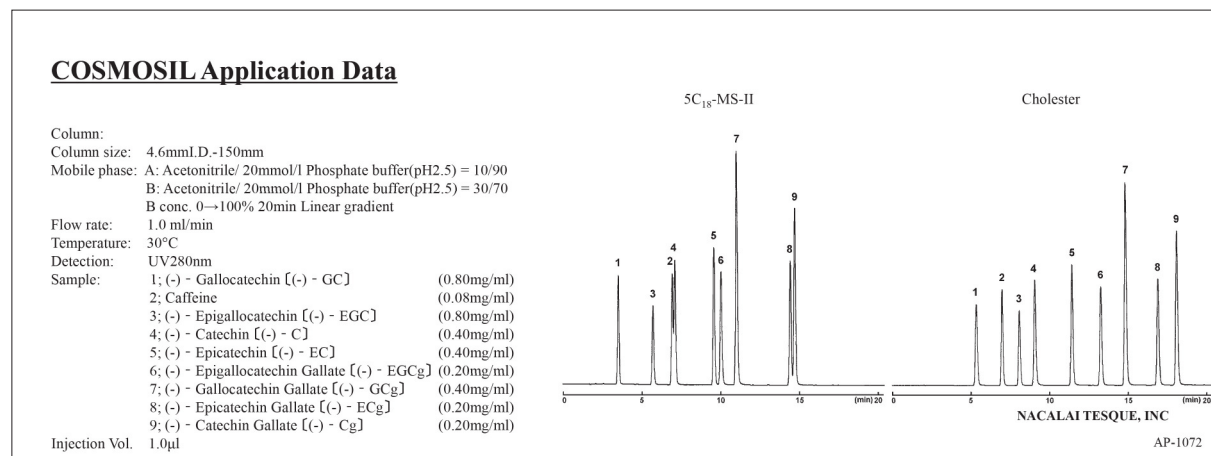
Efficiency of Preparative Separation

The figure below shows the comparison of efficiency of preparative separation with a C₁₈ column. Both columns show good separation. However, sample loading capacity for preparative separations can be affected by a slight difference in separation ability. COSMOSIL Cholester can load 4 times of sample volume compared with C₁₈ columns.

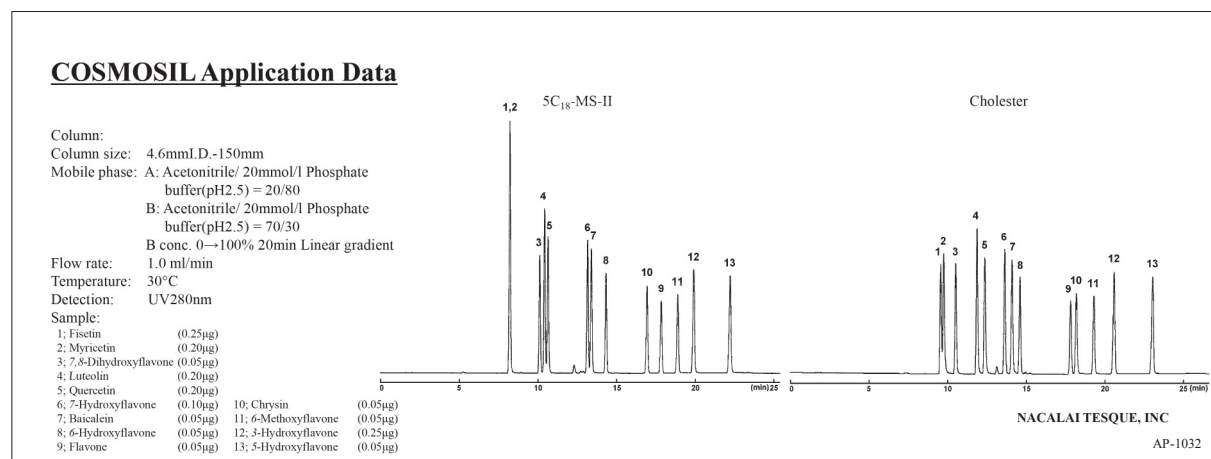


Applications

• Catechins



• Flavones



Ordering Information

• Analytical / Preparative Column (Particle Size: 5 μm)

COSMOSIL Cholesterol Packed Column

Column Size I.D. x Length (mm)	Product Number
1.0 x 150	05968-71
1.0 x 250	05969-61
2.0 x 30	08565-51
2.0 x 50	06352-91
2.0 x 100	06948-01
2.0 x 150	05971-11
2.0 x 250	05972-01
3.0 x 150	05973-91
3.0 x 250	05974-81

COSMOSIL Cholesterol Guard Column

Column Size I.D. x Length (mm)	Product Number
4.6 x 150	05976-61
4.6 x 150 3 lots set*	07970-03
4.6 x 250	05977-51
10 x 150	08011-91
10 x 250	05979-31
20 x 150	06088-71
20 x 250	05982-71
28 x 250	05985-41

*For 4.6 x 150 3 lots set, please refer to page 11.

For more information on 2.5Cholesterol (2.5 μm), please refer to page 62.