JAI Application note

No.A-009E



Recycling Preparative HPLC LaboACE LC-5060

Related Product : Recycling Preparative HPLC Series

## Separation of compounds that are inseparable by Silica columns 4

Keyword:

GPC Column, SEC Column, Size Exclusion Chromatography, Recycling Preparative HPLC

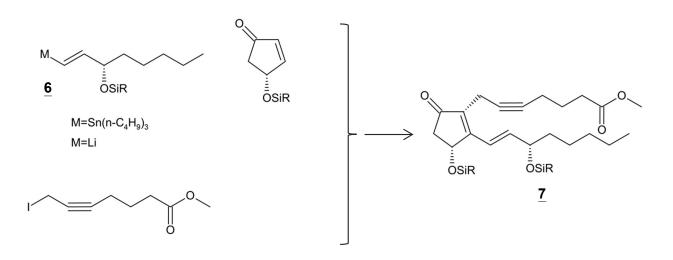
## Introduction

For substances that are unstable against silica-based fillers or that were inseparable by TLC, the combination of GPC (SEC) column and Recycling Preparative HPLC is often a very effective solution.

Here is an example of such studies by a professional who uses our Recycling Preparative HPLC systems.

## **Experiment and Results**

The useful intermediate for prostaglandins, compound  $\underline{7}$ , is obtained by reaction of the below three compounds. After the reaction, however, it was extremely difficult to separate the unreacted  $\underline{6}$  and the target compound  $\underline{7}$  by TLC. So we have tried to do it using GPC column.



## Conclusion

Using a JAIGEL-1H and a JAIGEL-2H connected in series with chloroform as the eluent, compounds 6 and 7 were easily separated with just one cycle .

<u>References</u>

Yasushi Morita, Masaaki Suzuki and Ryoji Noyori, J. of Org. Chem., Vol. 54, No.8, pp 1785-1787 (1989)

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