No.A-002E

Recycling Preparative HPLC
LaboACE LC-5060

Related Product : Recycling Preparative HPLC Series

Separation of Oligosaccharides by Organic GPC Column

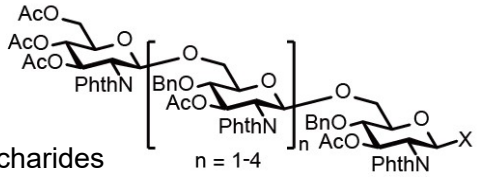
Keyword:
Oligosaccharides, Organic GPC Column, Size Exclusion Chromatography, Recycling Preparative HPLC

Introduction

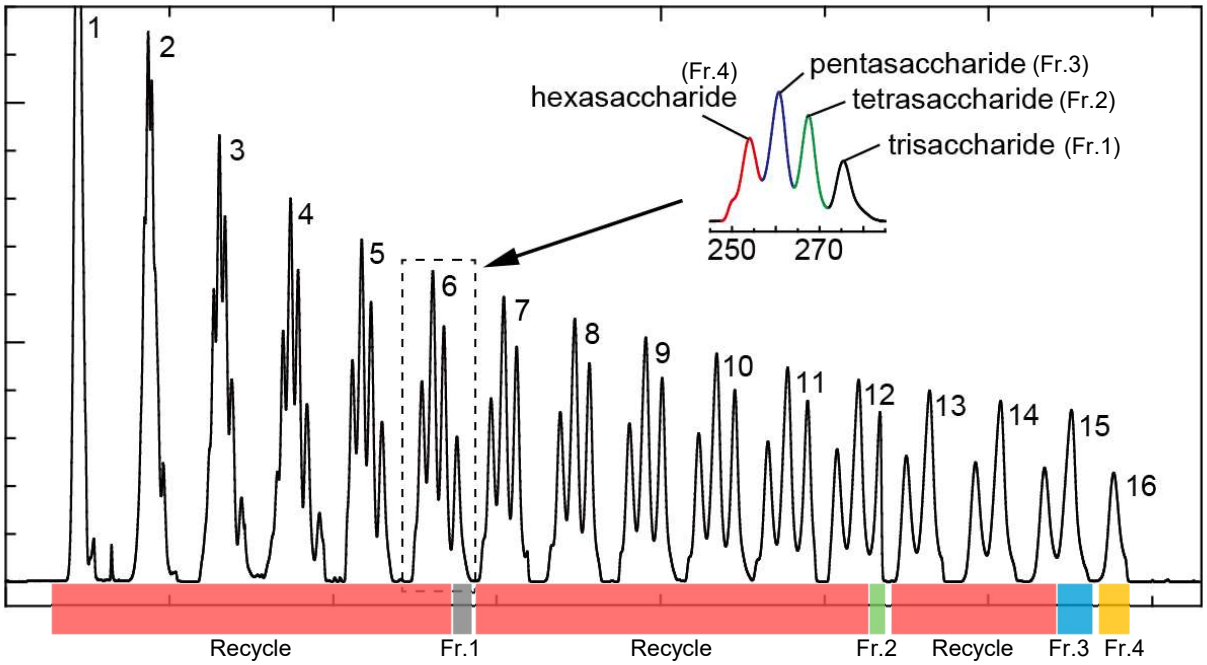
This is a study on separation of oligosaccharides by recycling preparative HPLC using organic GPC column. Oligosaccharides are normally insoluble in organic solvents, so we have modified the hydroxy groups to make them soluble in chloroform.

Experiment and Results

Instrument	: LC-9201 (Detector : UV(254 nm))
Column	: JAIGEL-2H + JAIGEL-2H in series
Mobile phase	: Chloroform
Flow rate	: 3.8 ml/min
Sample	: Mixture of di, tri, tetra, penta and hexa saccharides



We were able to fractionate trisaccharide at 6th, tetrasaccharide at 12th, pentasaccharide at 15th and hexasaccharide at 16th cycle.



Conclusion

We were able to separate those oligosaccharides by recycling preparative HPLC using organic GPC column when the hydroxy groups were chemically modified.

Data provided by courtesy of Prof. Nogami of Kyoto University. (Currently Tottori Univ.)

Japan Analytical Industry Co., Ltd.
Head Office 208 Musashi, Mizuho, Nishitama, Tokyo 190-1213 JAPAN
TEL +81-42-557-2331
URL https://www.jai.co.jp/english

March 2020