

# SHINWA EXPRESS

Application

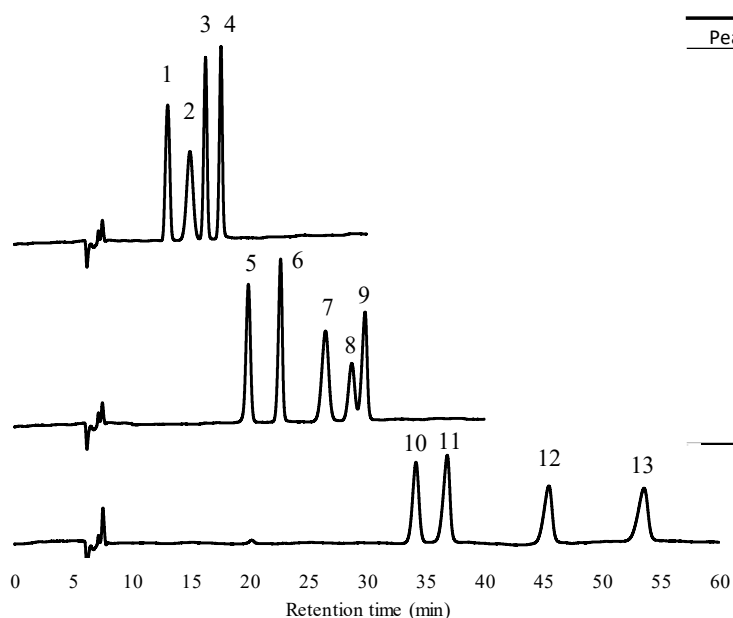
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## Analysis of saccharides using the ULTRON AF-HILIC-CD

In general, polymer and amide column are used for analysis of saccharides. However, separation of saccharides requires high temperature in order to suppress anomer separation. ULTRON AF-HILIC-CD column allows the separation of saccharides at room temperature without causing anomer separation. Shown below is a HILIC mode analysis of mono-, di and oligosaccharides at room temperature using the ULTRON AF-HILIC-CD.

### Mono-, Di- and Oligosaccharides



Peak No.	Sample	Group
1	Xylose	Monosaccharide
2	Fructose	Monosaccharide
3	Glucose	Monosaccharide
4	Mannitol	Sugar alcohol
5	Xylobiose	Disaccharide
6	Sucrose	Disaccharide
7	Lactulose	Disaccharide
8	Lactose	Disaccharide
9	Trehalose	Disaccharide
10	Xylotriose	Trisaccharide
11	1-Kestose (GF2)	Trisaccharide
12	Raffinose	Trisaccharide
13	Nystose (GF3)	Tetrasaccharide

Column: ULTRON AF-HILIC-CD (5  $\mu$ m)  
 Column size: 250 mm L x 4.6 mm I.D.  
 Mobile phase: H<sub>2</sub>O/CH<sub>3</sub>CN = 20/80  
 Flow rate: 0.5 mL/min

Column temp.: 30°C  
 Detection: RID  
 Injection vol.: 15  $\mu$ L

#### ● Features of the ULTRON AF-HILIC-CD

- This column has  $\beta$ -cyclodextrin combined chemically to the silica stationary phase via a spacer.
- This column can analyze between acid and neutral structural homologue and isomers of compounds with its high selectivity of molecular configuration.
- By optimizing the introduction amount of  $\beta$ -cyclodextrin, it achieved good reproducibility and durability.



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## ■ Analytical column specifications ■

Product name	Particle size ( $\mu\text{m}$ )	Column dimensions Length × I.D. (mm)
ULTRON AF-HILIC-CD	5	100 × 2.0
		150 × 2.0
		100 × 4.6
		150 × 4.6
		250 × 4.6

※ Please do not hesitate to contact us for the other dimensions.



Please feel free to contact us with questions related to analyses. Column screening services are also available.

Please be aware that specifications and prices are subject to change without prior notification.