

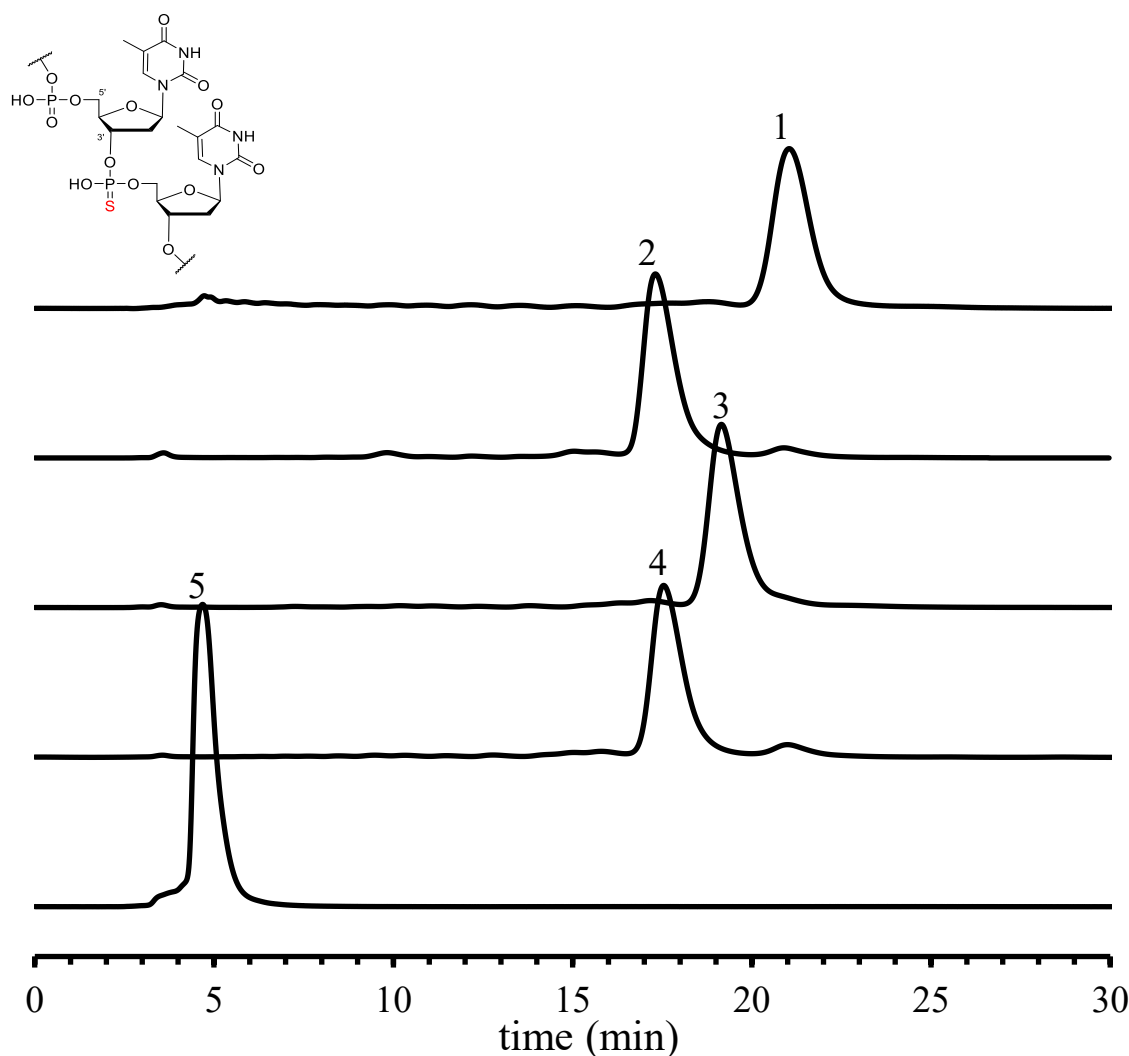
# SHINWA EXPRESS

Application

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## Analysis of Phosphorothioate oligo-deoxythymidine using the ULTRON AF-HILIC-CD (Part 4)

“Relationship between PS sites and retention time in dT20”



Column: ULTRON AF-HILIC-CD (2  $\mu$ m)  
 Column size: 150 mmL x 2.0 mm I.D.  
 Mobile phase: 100 mM  $\text{CH}_3\text{CO}_2\text{NH}_4/\text{CH}_3\text{CN} = 38/62$   
 Flow rate: 0.15 mL/min  
 Column temp.: 30°C  
 Detection: UV-260 nm  
 Diluent:  $\text{CH}_3\text{CN}/\text{TE buffer}^* = 70/30$   
 $^*$  TE buffer = 10 mM Tris-HCl buffer pH 8.0 +  
 1 mM EDTA buffer pH 8.0

Sample: 1. 5'-TTTTTTTTTTTTTTTTTTT-3'  
 2. 5'-T\*TTTTTTTTTTTTTTTTT-3'      \* ...PS modification  
 3. 5'-TTTTTTTTTT\*TTTTTTTTT-3'  
 4. 5'-TTTTTTTTTTTTTTTTTT\*T-3'  
 5. 5'-T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T\*T-3'



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

1. ULTRON AF-HILIC-CD is a HILIC column in which  $\beta$ -cyclodextrin is chemically bonded to a silica gel via a spacer.
2. The column has high selectivity for molecular structure.
3. The column shows high resolution analysis for structural analogues and structural isomers.
4. The column is suitable for sugar analysis by suppressing schiff base formation and anomer separation.

### ■ Analytical column specifications ■

#### ULTRON AF-HILIC-CD

| Product name                                                     | Particle size<br>(μm) | Column dimensions<br>Length x I.D. (mm) |                     |
|------------------------------------------------------------------|-----------------------|-----------------------------------------|---------------------|
| ULTRON AF-HILIC-CD                                               | 2                     | 50×2.0                                  |                     |
|                                                                  |                       | 50×3.0                                  |                     |
|                                                                  |                       | 100×2.0                                 |                     |
|                                                                  |                       | 100×3.0                                 |                     |
|                                                                  |                       | 150×2.0                                 |                     |
|                                                                  |                       | 150×3.0                                 |                     |
| ULTRON AF-HILIC-CD (PLSS)※<br>※ PLSS: PEEK-Lined Stainless steel |                       | 50×2.0                                  |                     |
|                                                                  |                       | 100×2.0                                 |                     |
|                                                                  |                       | 150×2.0                                 |                     |
| ULTRON AF-HILIC-CD (Two Guard Cartridges)                        |                       |                                         | 5×2.0               |
| ULTRON AF-HILIC-CD                                               | 5                     | 100×2.0                                 |                     |
|                                                                  |                       | 100×4.6                                 |                     |
|                                                                  |                       | 150×2.0                                 |                     |
|                                                                  |                       | 150×4.6                                 |                     |
|                                                                  |                       | 250×2.0                                 |                     |
|                                                                  |                       | 250×4.6                                 |                     |
| ULTRON AF-HILIC-CD.G                                             |                       |                                         | 10×4.0              |
| ULTRON AF-HILIC-CD (Two Guard Cartridges)                        |                       |                                         | 5×2.0               |
|                                                                  |                       |                                         | 10×4.6              |
| Holder for Guard Cartridge (with Coupler)                        |                       | -                                       | For 5×2.0 mm column |
|                                                                  | For 10×4.6 mm column  |                                         |                     |

#### ULTRON AF-HILIC-DA

| Product name                              | Particle size<br>(μm) | Column dimensions<br>Length x I.D. (mm) |
|-------------------------------------------|-----------------------|-----------------------------------------|
| ULTRON AF-HILIC-DA                        | 5                     | 100×2.0                                 |
|                                           |                       | 100×4.6                                 |
|                                           |                       | 150×2.0                                 |
|                                           |                       | 150×4.6                                 |
|                                           |                       | 250×4.6                                 |
| ULTRON AF-HILIC-DA (Two Guard Cartridges) |                       | 5×2.0                                   |
|                                           |                       | 10×4.6                                  |
| Holder for Guard Cartridge (with Coupler) | -                     | For 5×2.0 mm column                     |
|                                           |                       | For 10×4.6 mm column                    |

※ 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.