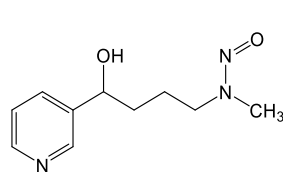
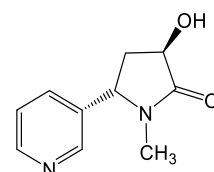


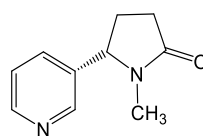
## Analysis of Nicotine metabolites and related compounds using the ULTRON AF-HILIC-CD



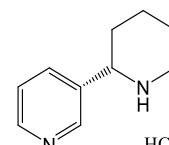
1. 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanol



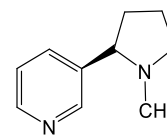
3. trans-3'-Hydroxycotinine



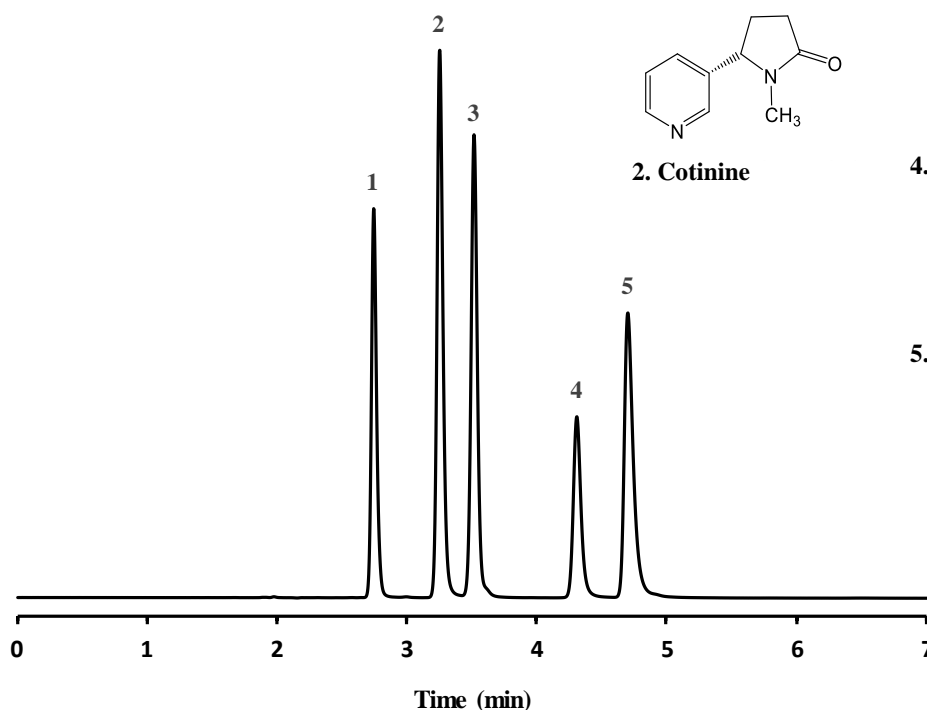
2. Cotinine



4. Anabasine hydrochloride



5. Nicotine

Column: ULTRON AF-HILIC-CD (2  $\mu$ m)

Column temp.: 30°C

Column size: 150 mm L x 3.0 mm I.D.

Detection: UV-254 nm

Mobile phase: 100 mM Sodium citrate buffer (pH 3.0)/CH<sub>3</sub>CN = 20/80Injection vol.: 1  $\mu$ L

Flow rate: 0.45 mL/min

### ● 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 (μm)	Column dimensions 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)※	2	50×2.0
※ PLSS: PEEK-Lined Stainless steel		100×2.0
		150×2.0
ULTRON AF-HILIC-CD (Two Guard Cartridges)	5	5×2.0
ULTRON AF-HILIC-CD		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 (μm)	Column dimensions 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	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.