

Five Distinct Polysaccharide Phases to Resolve 92 % of Your Enantiomers*

Lux columns offer a wide and complementary range of enantioselectivity for even the most difficult chiral separation projects.

- High efficiency and loading capacity
- Stable in Normal Phase, Polar Organic, SFC, and Reversed Phase Conditions
- 3 μm and 5 μm packed columns and 20 μm bulk media for scale up†

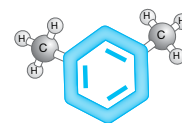
Technical Specifications

Particle Size	3, 5, 20* μm
pH Stability	2-9
Maximum Pressure	300 bar
Temperature Range	0-50 °C
Shipping Solvent	n-Hexane/2-propanol (9:1, v/v)

*Please inquire for availability

Lux chiral columns are made with high quality silica, and undergo a specialized coating and packing process that ensures high efficiencies while maintaining essential enantioselectivity abilities.

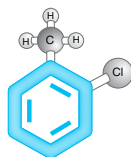
If Lux analytical columns (≤ 4.6 mm ID) do not provide at least an equivalent or better separation as compared to a competing column of the same particle size, similar phase and dimensions, send in your comparative data within 45 days and keep the Lux column for FREE.



Cellulose-O-CONH

Lux Cellulose-1

Cellulose tris(3,5-dimethylphenylcarbamate)



Cellulose-O-CONH

Lux Cellulose-2

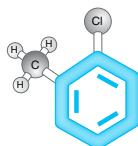
Cellulose tris(3-chloro-4-methylphenylcarbamate)



Cellulose-O

Lux Cellulose-3

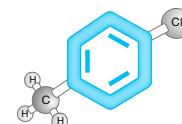
Cellulose tris(4-methylbenzoate)



Cellulose-O-CONH

Lux Cellulose-4

Cellulose tris(4-chloro-3-methylphenylcarbamate)



Amylose-O-CONH

Lux Amylose-2

Amylose tris(5-chloro-2-methylphenylcarbamate)

* Based on 233 compounds screened on all five Lux phases

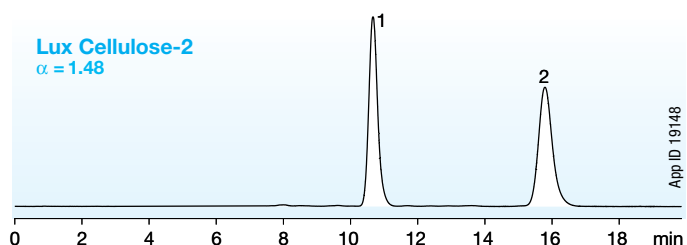
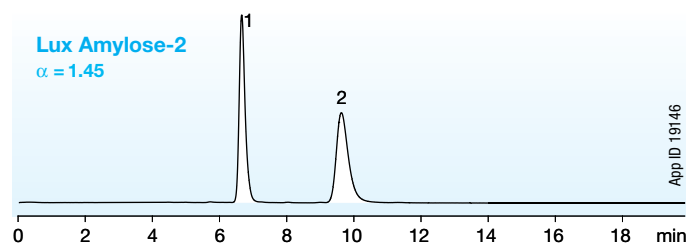
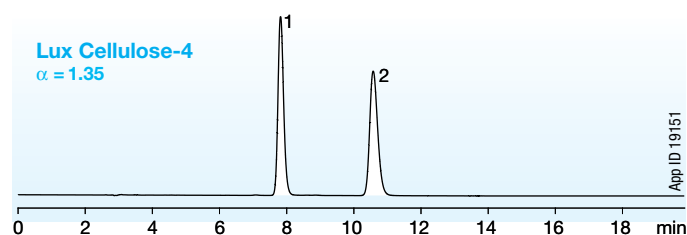
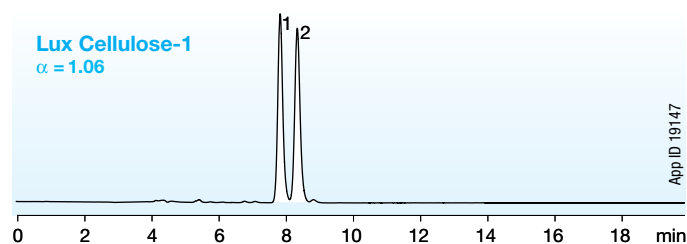


CHIRAL LC | LUX

Achieve Optimal Resolution by Screening all Five Complementary Lux Chiral Columns

Utilizing differences in selectivity can help develop methods more efficiently by offering broad and contrasting chiral recognition abilities. Lux chiral selectors provide a variety of selectivities that give you the opportunity to screen for the ideal chiral separation.

Etozolin



Conditions for all columns:

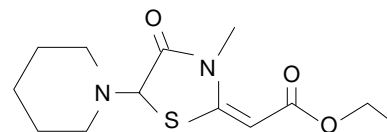
Dimensions: 250 x 4.6 mm

Mobile Phase: Acetonitrile / 0.1 % Diethylamine in 20 mM NH_4HCO_3 (60:40)

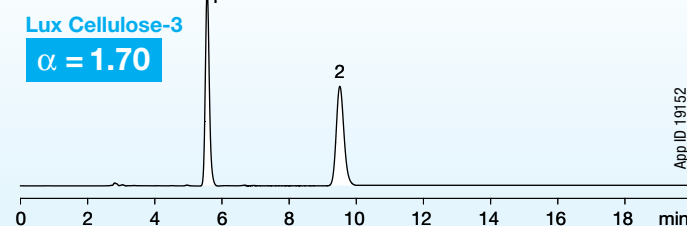
Flow Rate: 1 mL/min

Detection: UV @ 220 nm

Temperature: Ambient



Optimal Resolution



Based on a five phase screen under reversed phase conditions, the optimal chiral stationary phase for resolving Etozolin is Lux Cellulose-3.

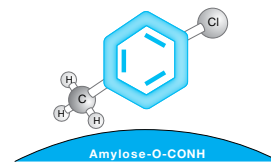
Comparative separations may not be representative of all applications.

Lux Chiral Stationary Phases

The Lux line of cellulose and amylose-based chiral stationary phases includes five complementary selectivities.

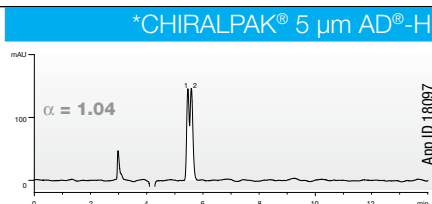
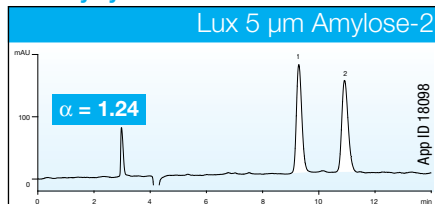
Lux Amylose-2: Chlorinated Amylose Chiral Selector

This first-to-market chlorinated amylose phenylcarbamate derivative offers complex chiral recognition components that greatly increase the chances of achieving chiral resolution.



Amylose tris(5-chloro-2-methylphenylcarbamate)

2-Phenylcyclohexanone



Conditions for both columns:

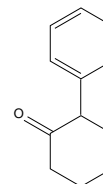
Dimensions: 250 x 4.6 mm

Mobile Phase: 0.1 % Diethylamine in Hexane /
0.1 % Diethylamine in Isopropanol
(90:10)

Flow Rate: 1 mL/min

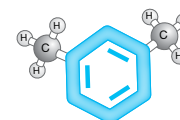
Detection: UV @ 220 nm

Temperature: Ambient



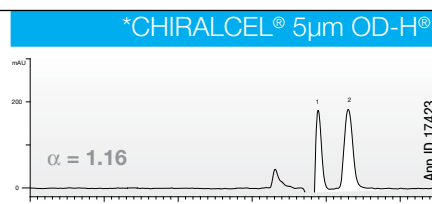
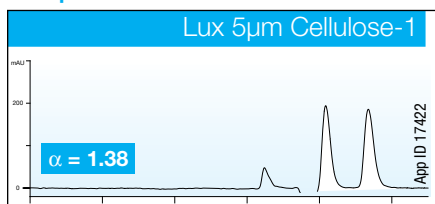
Lux Cellulose-1: Dimethyl Cellulose Chiral Selector

This universally trusted cellulose phenylcarbamate derivative is absolutely essential to any chiral screen.



Cellulose tris(3,5-dimethylphenylcarbamate)

Metoprolol



Conditions for both columns:

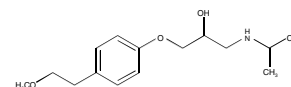
Dimensions: 250 x 4.6 mm

Mobile Phase: 0.1 % Diethylamine in Acetonitrile /
0.1 % Diethylamine in Isopropanol
(95:5)

Flow Rate: 1 mL/min

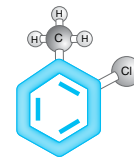
Detection: UV @ 220 nm

Temperature: Ambient



Lux Cellulose-2: Chlorinated Cellulose Carbamate Phase

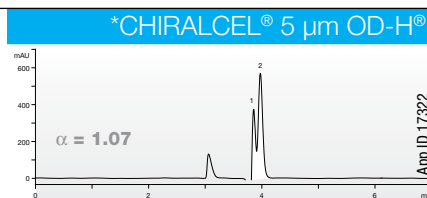
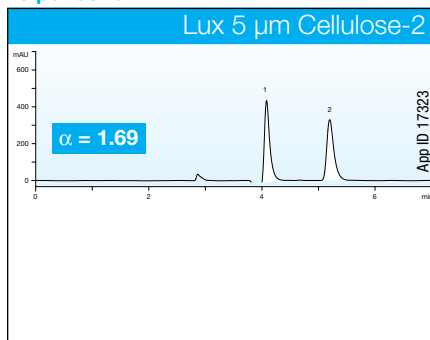
This first-to-market halogenated cellulose phenylcarbamate derivative offers unique chiral recognition abilities that complement the rest of the Lux family of columns.



Cellulose-O-CONH

Cellulose tris(3-chloro-4-methylphenylcarbamate)

Tolperisone



Conditions for both columns:

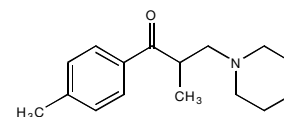
Dimensions: 250 x 4.6 mm

Mobile Phase: 0.1 % Diethylamine in Hexane /
0.1 % Diethylamine in Isopropanol
(90:10)

Flow Rate: 1 mL/min

Detection: UV @ 220 nm

Temperature: Ambient



Lux Cellulose-3: Cellulose Ester Phase

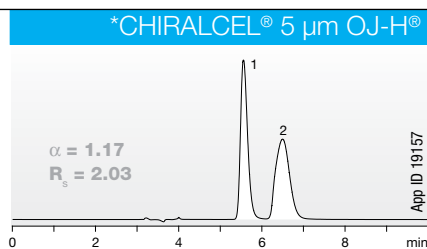
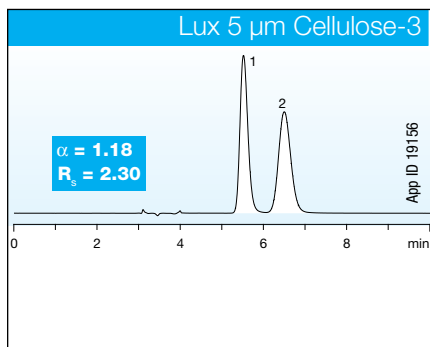
This cellulose methylbenzoate derivative offers distinct and complementary chiral recognition abilities.



Cellulose-O

Cellulose tris(4-methylbenzoate)

Disopyramide



Conditions for both columns:

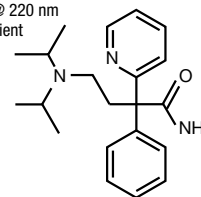
Dimensions: 250 x 4.6 mm

Mobile Phase: 0.1 % Diethylamine in Hexane /
0.1 % Diethylamine in Ethanol
(90:10)

Flow Rate: 1 mL/min

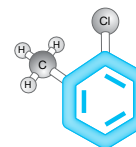
Detection: UV @ 220 nm

Temperature: Ambient



Lux Cellulose-4: Chlorinated Cellulose Carbamate Phase

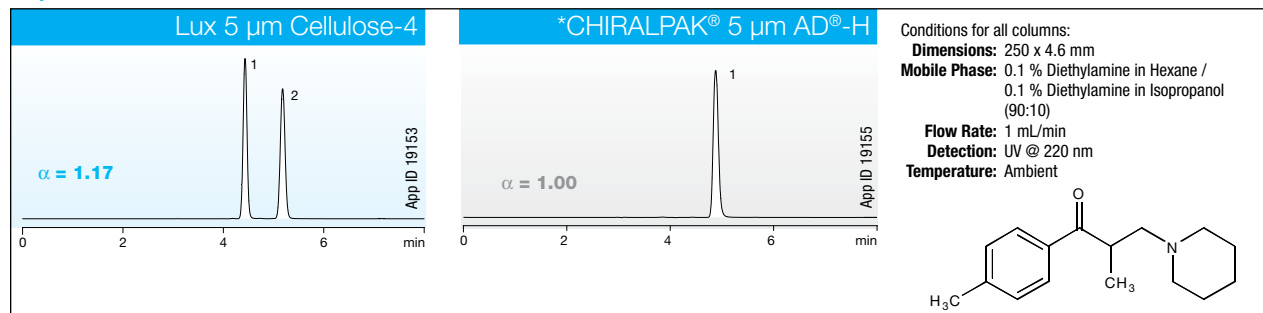
This chlorinated cellulose phenylcarbamate derivative offers unique chiral recognition abilities.



Cellulose-O-CONH

Cellulose tris(4-chloro-3-methylphenylcarbamate)

Tolperisone



Comparative separations may not be representative of all applications.



Chiral Screening and Separation Services

HPLC | SFC | Preparative | Training

For more information on our services or to begin a project, please contact your local Phenomenex chiral expert or email us at: phenologix@phenomenex.com

You can also visit us on the web at:
www.phenomenex.com/phenologix



CHIRAL LC | LUX



If Lux analytical columns (≤ 4.6 mm ID) do not provide at least an equivalent or better separation as compared to a competing column of the same particle size, similar phase and dimensions, send in your comparative data within 45 days and keep the Lux column for FREE.

Ordering Information

3 μ m Analytical Columns (mm)							SecurityGuard™ Cartridges (mm)	
Phases	50 x 2.0	150 x 2.0	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	4 x 2.0*	4 x 3.0*
							/10pk	/10pk
Cellulose-1	00B-4458-B0	00F-4458-B0	00B-4458-E0	00D-4458-E0	00F-4458-E0	00G-4458-E0	AJO-8402	AJO-8403
Cellulose-2	00B-4456-B0	00F-4456-B0	00B-4456-E0	00D-4456-E0	00F-4456-E0	00G-4456-E0	AJO-8398	AJO-8366
Cellulose-3	00B-4492-B0	00F-4492-B0	00B-4492-E0	00D-4492-E0	00F-4492-E0	00G-4492-E0	AJO-8621	AJO-8622
Cellulose-4	00B-4490-B0	00F-4490-B0	00B-4490-E0	00D-4490-E0	00F-4490-E0	00G-4490-E0	AJO-8626	AJO-8627
Amylose-2	00B-4471-B0	00F-4471-B0	00B-4471-E0	00D-4471-E0	00F-4471-E0	00G-4471-E0	AJO-8471	AJO-8470
for ID:							2.0–3.0 mm	3.2–8.0 mm

5 μ m Analytical Columns (mm)						SecurityGuard™ Cartridges (mm)	
Phases	50 x 2.0	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	4 x 2.0*	4 x 3.0*
						/10pk	/10pk
Cellulose-1	00B-4459-B0	00B-4459-E0	00D-4459-E0	00F-4459-E0	00G-4459-E0	AJO-8402	AJO-8403
Cellulose-2	00B-4457-B0	00B-4457-E0	00D-4457-E0	00F-4457-E0	00G-4457-E0	AJO-8398	AJO-8366
Cellulose-3	00B-4493-B0	00B-4493-E0	00D-4493-E0	00F-4493-E0	00G-4493-E0	AJO-8621	AJO-8622
Cellulose-4	00B-4491-B0	00B-4491-E0	00D-4491-E0	00F-4491-E0	00G-4491-E0	AJO-8626	AJO-8627
Amylose-2	00B-4472-B0	00B-4472-E0	00D-4472-E0	00F-4472-E0	00G-4472-E0	AJO-8471	AJO-8470
for ID:						2.0–3.0 mm	3.2–8.0 mm

5 μ m Semi-Prep Columns (mm)			SecurityGuard™ Cartridges (mm)
Phases	150 x 10.0	250 x 10.0	10 x 10.0†
			/3pk
Cellulose-1	00F-4459-N0	00G-4459-N0	AJO-8404
Cellulose-2	00F-4457-N0	00G-4457-N0	AJO-8399
Cellulose-3	00F-4493-N0	00G-4493-N0	AJO-8623
Cellulose-4	00F-4491-N0	00G-4491-N0	AJO-8628
Amylose-2	00F-4472-N0	00G-4472-N0	AJO-8472
for ID:			9–16 mm

20 μ m Bulk Media		
Phases	100 g	1 kg
Cellulose-1	04G-4473	04K-4473
Cellulose-2	04G-4464	04K-4464

Please inquire for 20 μ m Lux Amylose-2, Cellulose-3 or Cellulose-4 media.



5 μ m Axia™ Packed Preparative Columns (mm)					SecurityGuard™ Cartridges (mm)	
Phases	150 x 21.2	250 x 21.2	250 x 30	250 x 50	15 x 21.2**	15 x 30.0*
					/ea	/ea
Cellulose-1	00F-4459-P0-AX	00G-4459-P0-AX	00G-4459-U0-AX	00G-4459-V0-AX	AJO-8405	AJO-8406
Cellulose-2	00F-4457-P0-AX	00G-4457-P0-AX	00G-4457-U0-AX	00G-4457-V0-AX	AJO-8400	AJO-8401
Cellulose-3	00F-4493-P0-AX	00G-4493-P0-AX	00G-4493-U0-AX	00G-4493-V0-AX	AJO-8624	AJO-8625
Cellulose-4	00F-4491-P0-AX	00G-4491-P0-AX	00G-4491-U0-AX	00G-4491-V0-AX	AJO-8629	AJO-8630
Amylose-2	00F-4472-P0-AX	00G-4472-P0-AX	00G-4472-U0-AX	00G-4472-V0-AX	AJO-8473	AJO-8474
for ID:					18–29 mm	30–49 mm



*SecurityGuard Analytical Cartridges require holder, Part No. : KJO-4282
†SemiPrep SecurityGuard™ Cartridges require holder, Part No. : AJO-7220

**PREP SecurityGuard Cartridges require holder, Part No. : AJO-8223
*PREP SecurityGuard Cartridges require holder, Part No. : AJO-8277

3 μ m Method Screening Kits (save 10 % when purchased as a kit)		
	50 x 4.6 mm	250 x 4.6 mm
Screening Kit	KH0-8483	KH0-8482

Kit contains one column of each phase.

Column Performance Check Standard

Part No.	Description	Unit	Price
ALO-8412	Chiral Test Mix No. 5 (Lux)	ea	



*CHIRALPAK, CHIRALCEL, AD, OD-H, and OJ-H are registered trademarks of DAICEL Chemical Industries, Ltd.

Columns used for comparison were manufactured by DAICEL Chemical Industries, Ltd.