

Lux[®] Chiral Columns

guarantee

Replace CHIRALCEL[®] and CHIRALPAK[®] Columns with Amazingly Good Lux Columns at a Fraction of the Cost!

Lux columns are guaranteed to perform similar to or better than the equivalent Chiral Technologies column of matching polysaccharide backbone and chiral selector. Lux phases can also provide alternative selectivity to other chiral selectors when separation is not achieved or when higher resolution is required.

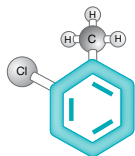
- High efficiency and loading capacity
- Stable in normal phase, polar organic, SFC, and reversed phase conditions
- 3 μ m and 5 μ m packed columns and 10 μ m and 20 μ m bulk media for scale up[†]

Technical Specifications

Particle Size	3, 5, 10 [†] , 20 [†] μ m
pH Stability	2-9
Maximum Pressure	300 bar
Temperature Range	0-50 °C
Shipping Solvent	n-Hexane/2-propanol (9:1, v/v)
Switching Solvent	Methanol/Ethanol (9:1, v/v)

[†]Please inquire for availability

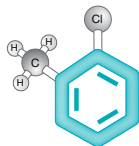
Lux columns offer a wide and complementary range of enantioselectivity for even the most difficult chiral separation projects. Our five distinct polysaccharide phases can resolve 92 % of your enantiomers*.



Cellulose-O-CONH

Lux Cellulose-2

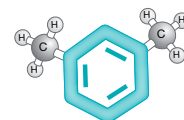
Cellulose tris(3-chloro-4-methylphenylcarbamate)
Guaranteed Alternative to
CHIRALCEL OZ, OZ-H[®], OZ-3, OZ-RH, and OZ-3R



Cellulose-O-CONH

Lux Cellulose-4

Cellulose tris(4-chloro-3-methylphenylcarbamate)
Guaranteed Alternative to
CHIRALCEL OX-H, OX-3, OX-RH, and OX-3R



Cellulose-O-CONH

Lux Cellulose-1

Cellulose tris(3,5-dimethylphenylcarbamate)
Guaranteed Alternative to
CHIRALCEL OD[®], OD-H[®], OD-3, OD-RH, and OD-3R



Cellulose-O

Lux Cellulose-3

Cellulose tris(4-methylbenzoate)
Guaranteed Alternative to
CHIRALCEL OJ[®], OJ-H[®], OJ-3, OJ-RH, and OJ-3R



Amylose-O-CONH

Lux Amylose-2

Amylose tris(5-chloro-2-methylphenylcarbamate)
Guaranteed Alternative to
CHIRALPAK AY[®], AY-H[®], AY-3, AY-RH, and AY-3R



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.

Lux[®] Chiral Columns



Lux Chiral Stationary Phases

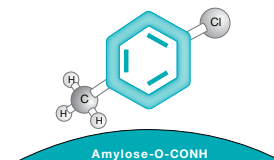
The Lux line of cellulose-based and amylose-based chiral stationary phases includes five complementary selectivities.

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.

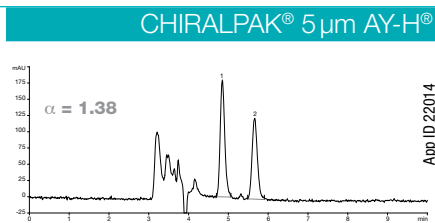
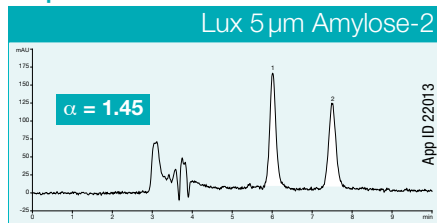


Excellent separation at a fraction of the cost.



Amylose tris(5-chloro-2-methylphenylcarbamate)

Ifenprodil



Conditions for both columns:

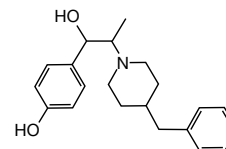
Dimensions: 250 x 4.6 mm

Mobile Phase: 0.1 % Diethylamine in Hexane /
0.1 % Diethylamine in Ethanol
(80:20)

Flow Rate: 1 mL/min

Detection: UV @ 220 nm

Temperature: Ambient

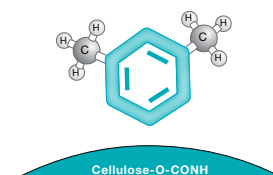


Lux Cellulose-1: Dimethyl Cellulose Chiral Selector

This universally trusted cellulose phenylcarbamate derivative is absolutely essential to any chiral screen. Guaranteed alternative to CHIRALCEL[®] OD-H[®]. Expect equivalent or better performance.

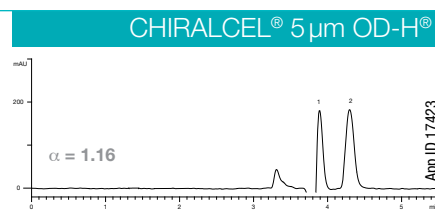
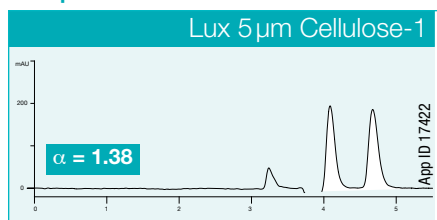


Excellent separation at a fraction of the cost.



Cellulose tris(3,5-dimethylphenylcarbamate)

Metoprolol



Conditions for both columns:

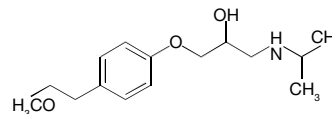
Dimensions: 250 x 4.6 mm

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



Comparative separations may not be representative of all applications.

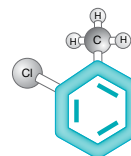
Lux[®] Chiral Columns

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.



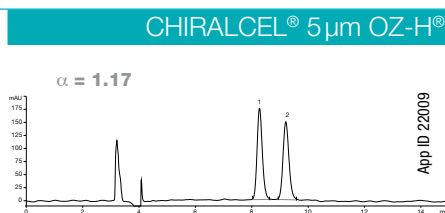
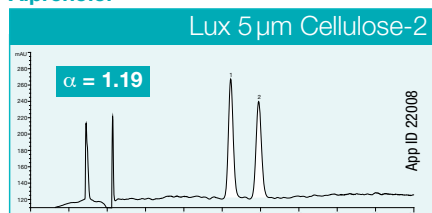
Excellent separation at a fraction of the cost.



Cellulose-O-CNH

Cellulose tris(3-chloro-4-methylphenylcarbamate)

Alprenolol



Conditions for both columns:

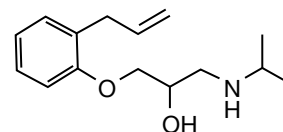
Dimensions: 250 x 4.6 mm

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-3: Cellulose Ester Phase

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



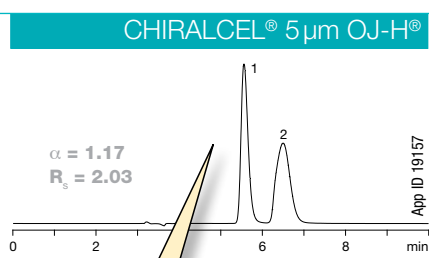
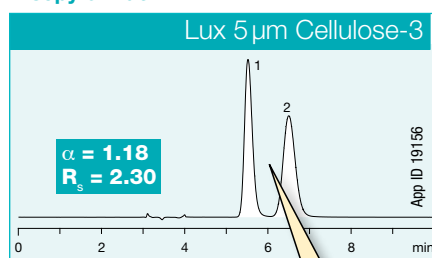
Excellent separation at a fraction of the cost.



Cellulose-O

Cellulose tris(4-methylbenzoate)

Disopyramide



Similar Lux phases can offer equivalent, if not better, performance when compared to CHIRALCEL[®] and CHIRALPAK[®]

Conditions for both columns:

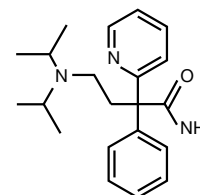
Dimensions: 250 x 4.6 mm

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



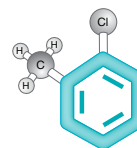
Lux[®] Chiral Columns

Lux Cellulose-4: Chlorinated Cellulose Carbamate Phase

This chlorinated cellulose phenylcarbamate derivative offers unique chiral recognition abilities.



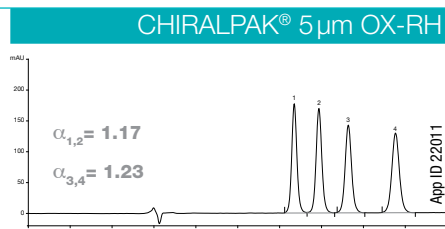
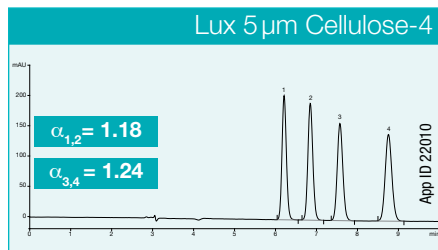
Excellent separation at a fraction of the cost.



Cellulose-O-CONH

Cellulose tris(4-chloro-3-methylphenylcarbamate)

Cyproconazole



Conditions for both columns:

Dimensions: 250 x 4.6 mm

Mobile Phase: 0.1 % Diethylamine in Acetonitrile /

0.1 % Diethylamine in 20 mM

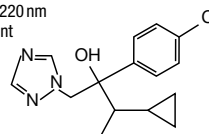
Ammonium bicarbonate

(60:40)

Flow Rate: 1 mL/min

Detection: UV @ 220 nm

Temperature: Ambient



Comparative separations may not be representative of all applications.

FREE Chiral Screening for HPLC and SFC

Have a sample and need a separation method? We can help!

Reliable methods and fast turnarounds are our specialty. Depending on compound type, we screen multiple chiral stationary phases under different conditions and return a detailed report of the recommended separation method so you can begin work right away.



We provide the following services:

Chiral Screening

- Normal Phase
- Reversed Phase
- Polar Organic
- SFC

Method Optimization Services

- Fast Turnaround
- Easy Method Transfer
- Continued Support

Preparative and Process Scale-Up

- Media Screening
- Small Scale Purification
- DAC Packing Assistance

For more information or to begin a project today,
please contact your local Phenomenex representative

or email us at:

phenologix@phenomenex.com

You can also visit us online:

www.phenomenex.com/phenologix

phenoLogixSM
Your Method. Our Scientists.

LUX | CHIRAL LC



Lux[®] Chiral Columns

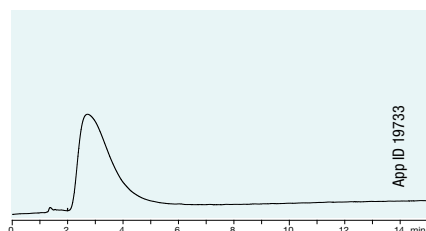
Achieve Optimal Resolution by Screening All Five Complementary Lux Chiral Columns

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.

Rabeprazole

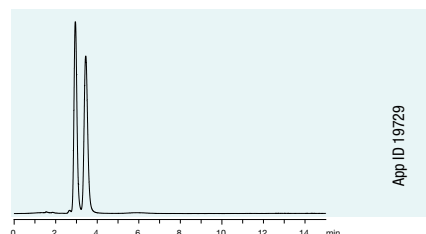
Lux 5 μ m Amylose-2

$\alpha = 0.00$



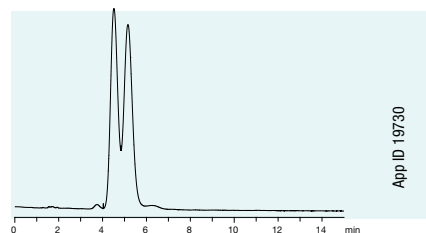
Lux 5 μ m Cellulose-1

$\alpha = 1.30$



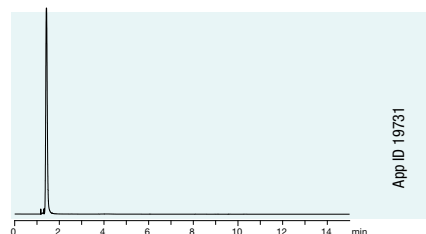
Lux 5 μ m Cellulose-2

$\alpha = 1.19$



Lux 5 μ m Cellulose-3

$\alpha = 0.00$



Conditions for all columns:

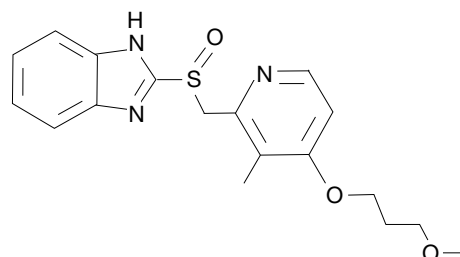
Dimensions: 150 x 4.6 mm

Mobile Phase: 0.1 % Diethylamine in 10 mM Ammonium bicarbonate/
0.1 % Diethylamine in Methanol
(80:20)

Flow Rate: 1.5 mL/min

Detection: UV @ 286 nm

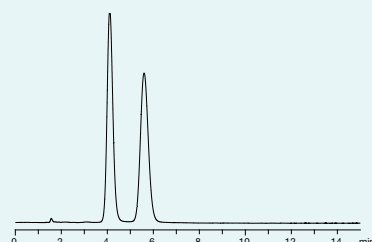
Temperature: Ambient



Optimal Resolution

Lux 5 μ m Cellulose-4

$\alpha = 1.53$



Based on a five phase screen under reversed phase conditions, the optimal chiral stationary phase for resolving Rabeprazole is Lux Cellulose-4.

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guarantee



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

*Inquire for Lux 10 μ m Cellulose-1 and Cellulose-2 columns.

Bulk Media		
Phases	100 g	1 kg
10 μ m		
Cellulose-1	04G-4501	04K-4501
Cellulose-2	04G-4502	04K-4502
20 μ m		
Cellulose-1	04G-4473	04K-4473
Cellulose-2	04G-4464	04K-4464
Cellulose-3	04G-4504	04K-4504
Cellulose-4	04G-4503	04K-4503

Please inquire for 20 μ m Lux Amylose-2 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

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

‡SFC PREP SecurityGuard Cartridges require holder, Part No. : AJO-8617

♦HPLC PREP SecurityGuard Cartridges require holder, Part No. : AJO-8277

‡SFC PREP SecurityGuard Cartridges require holder, Part No. : AJO-8618



Column Performance Check Standard

Part No.	Description	Unit	Price
AL0-8412	Chiral Test Mix No. 5 (Lux)	ea	



Lux Chiral Method Screening Kits are available. Please contact your Phenomenex representative for more information.

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Columns used for comparison were manufactured by DAICEL Corporation. Phenomenex is in no way affiliated with DAICEL Corporation.