

# EASY CHIRAL METHOD DEVELOPMENT SOLUTIONS

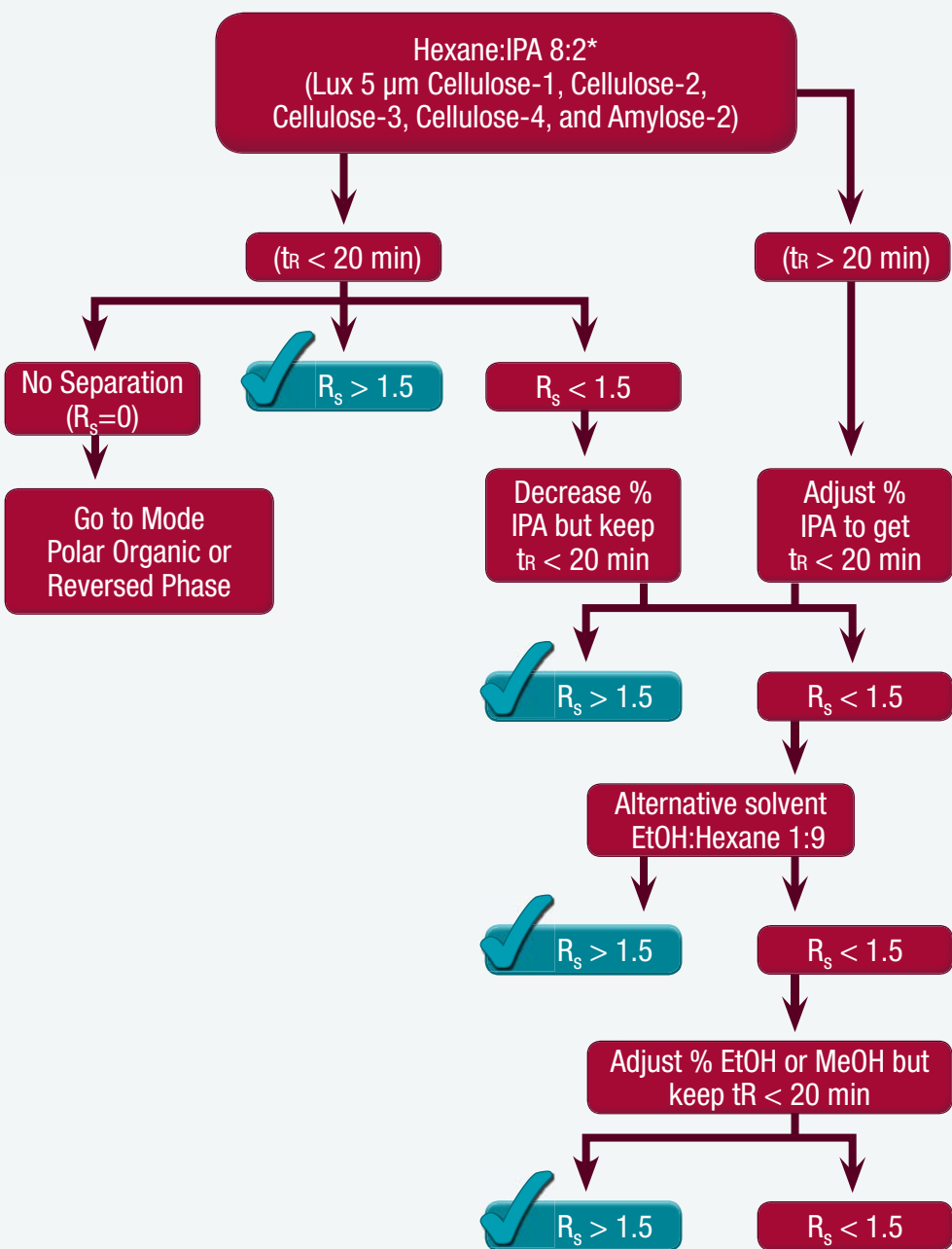
## Simplify Your Screening Strategy

With five unique Lux™ stationary phases to screen, achieving optimal chiral separation is easier than ever

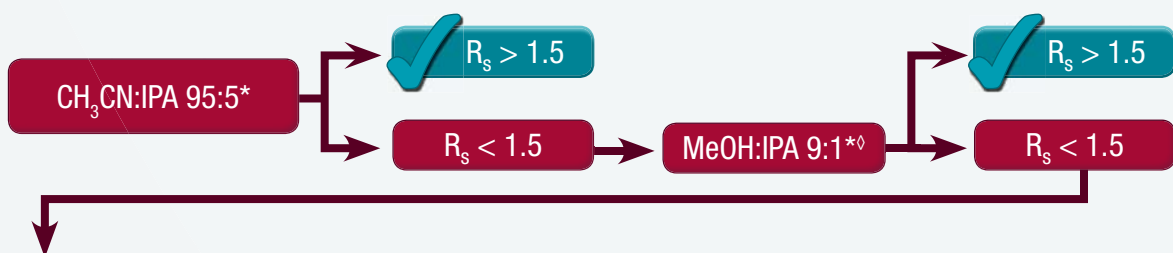
<p><b>Lux™ Cellulose-1</b> cellulose tris(3,5-dimethylphenylcarbamate)</p> <p>Cellulose Backbone Guaranteed Replacement For CHIRALCEL® OD-H®</p>	<p><b>Lux™ Cellulose-2</b> cellulose tris(3-chloro-4-methylphenylcarbamate)</p> <p>Cellulose Backbone Chlorinated Cellulose Phase</p>	<p><b>Lux™ Cellulose-3</b> cellulose tris(4-methylbenzoate)</p> <p>Cellulose Backbone Cellulose Ester Chiral Selector</p>	<p><b>Lux™ Cellulose-4</b> cellulose tris(4-chloro-3-methylphenylcarbamate)</p> <p>Cellulose Backbone Novel Chlorinated Cellulose Phase</p>	<p><b>Lux™ Amylose-2</b> amylose tris(5-chloro-2-methylphenylcarbamate)</p> <p>Amylose Backbone Chlorinated Amylose Phase</p>
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### HPLC SCREEN

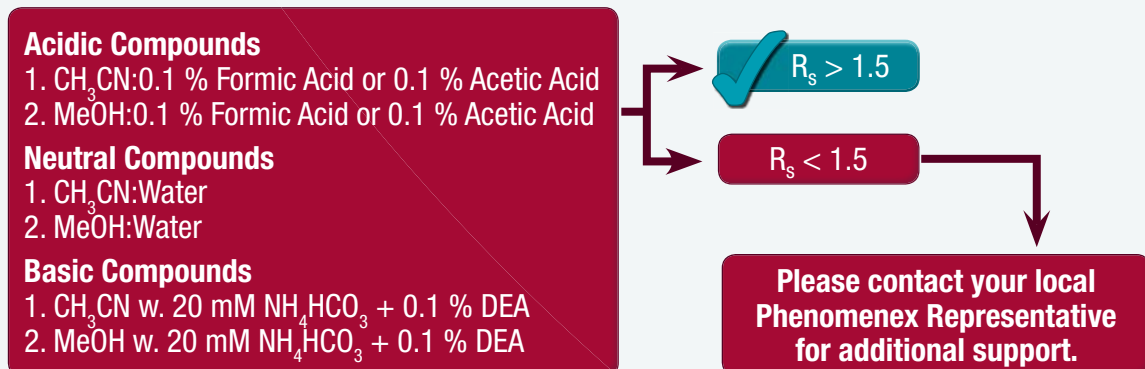
#### Normal Phase



#### Polar Organic



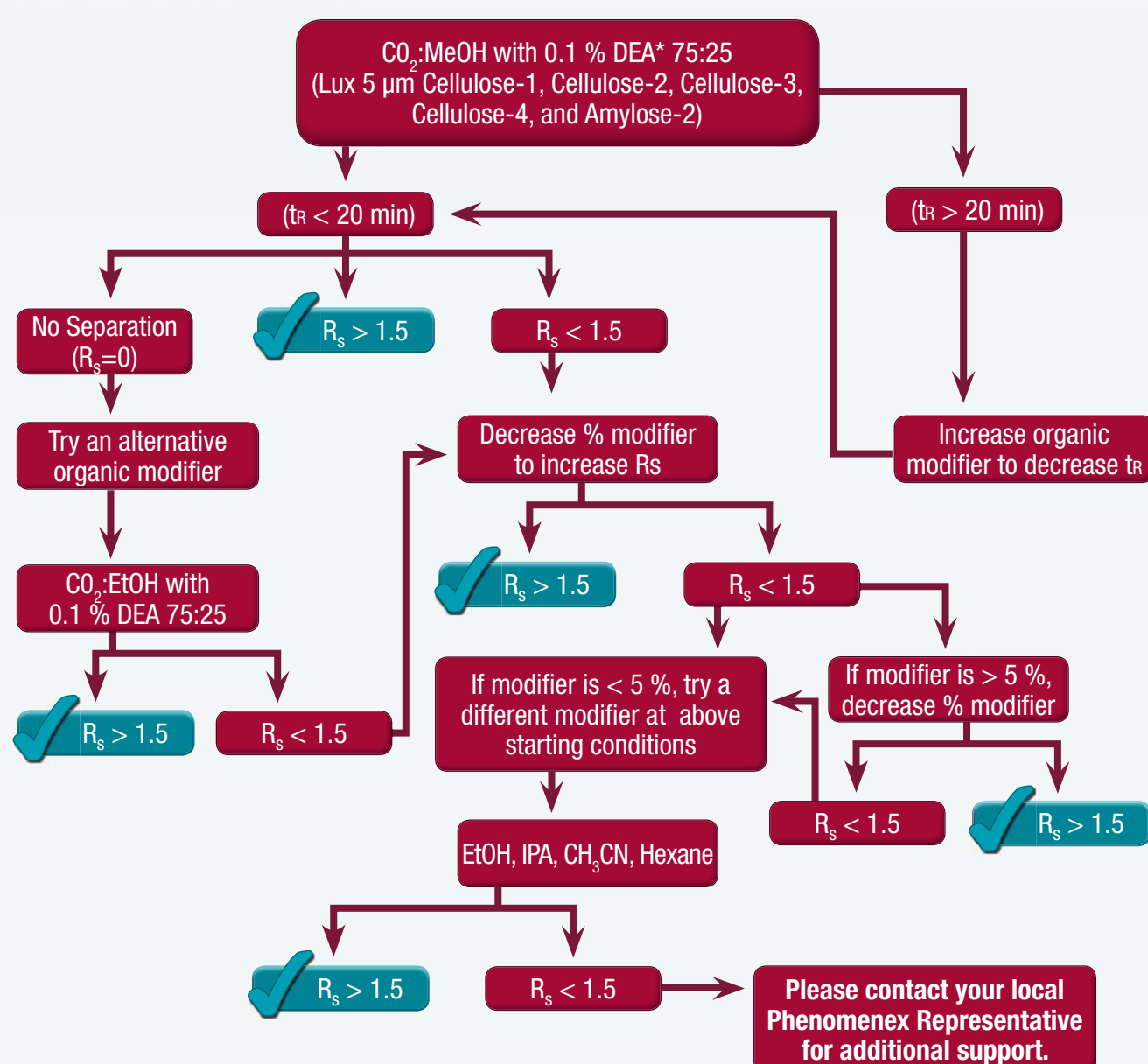
#### Reversed Phase



Notes: This screening strategy can be started at any step depending on the properties of the racemates. A common dimension used in chiral screening is 250 x 4.6 mm.  
\* Use 0.1% DEA with basic and neutral compounds and 0.1% HCOOH with acidic and neutral compounds.  
† Changing % IPA in methanol can be occasionally beneficial.

Key IPA: Isopropanol; DEA: Diethylamine; MeOH: Methanol; CH<sub>3</sub>CN: Acetonitrile; EtOH: Ethanol; CH<sub>3</sub>COONH<sub>4</sub>: Ammonium acetate; HCOOH: Formic acid; NH<sub>4</sub>HCO<sub>3</sub>: Ammonium bicarbonate; CO<sub>2</sub>: Carbon Dioxide

### SFC SCREEN



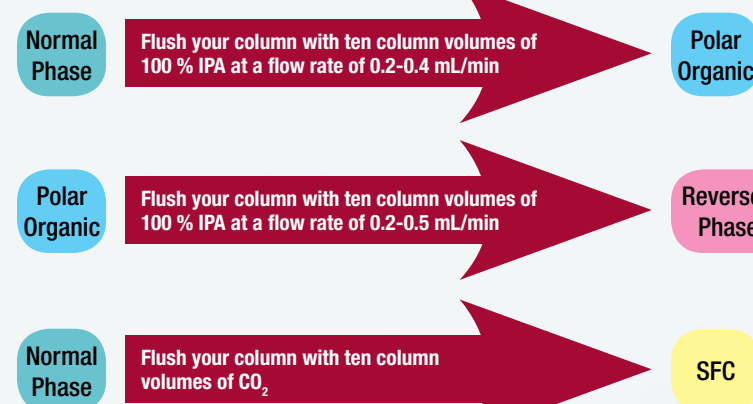
\*Can also use 0.1% Formic Acid or 0.1% TFA

Please contact your local Phenomenex Representative for additional support.

### SOLVENT CONSIDERATIONS

#### Solvent Switching

Lux columns are shipped in 90% Hexane : 10% IPA



COMPATIBLE	
<b>Polar Organic</b>	<ul style="list-style-type: none"> <li>Methanol</li> <li>Acetonitrile</li> <li>IPA</li> <li>Mixtures of above</li> </ul>
<b>Normal Phase</b>	<ul style="list-style-type: none"> <li>Alkane/alcohol mixtures</li> </ul>
<b>Reversed Phase</b>	<ul style="list-style-type: none"> <li>Aqueous methanol/acetonitrile</li> <li>Buffer and methanol/acetonitrile mixtures</li> </ul>
<b>SFC</b>	<ul style="list-style-type: none"> <li>Supercritical CO<sub>2</sub></li> </ul>
AVOID	
<ul style="list-style-type: none"> <li>Tetrahydrofuran</li> <li>Acetone</li> <li>Chlorinated hydrocarbons</li> <li>Ethylacetate</li> </ul>	<ul style="list-style-type: none"> <li>Dimethylsulfoxide</li> <li>Dimethylformamide</li> <li>N-methylformamide</li> <li>Pyridine</li> </ul>

## Chiral Screening and Separation Services

Call or visit us online at [www.phenomenex.com/info/phenodev](http://www.phenomenex.com/info/phenodev)