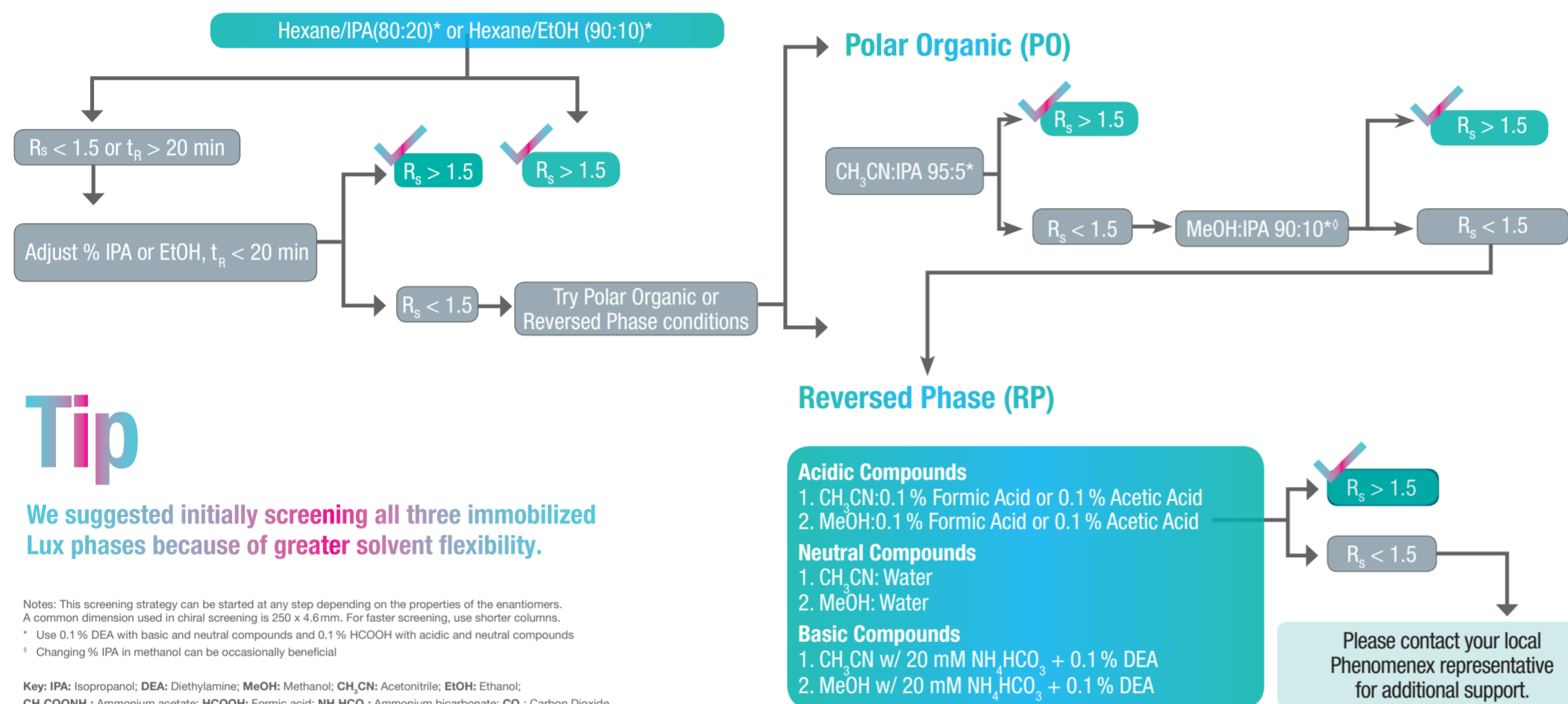


# Simplified Chiral HPLC/SFC Column Screening Strategies

Immobilized			Coated						
<b>Lux i-Amylose-1</b> Amylose tris (3,5-dimethylphenylcarbamate)	<b>Lux i-Amylose-3</b> Amylose tris (3-chloro-5-methylphenylcarbamate)	<b>Lux i-Cellulose-5</b> Cellulose tris (3,5-dichlorophenylcarbamate)	<b>Lux Amylose-1</b> Amylose tris (3,5-dimethylphenylcarbamate)	<b>Lux Amylose-2</b> Amylose tris (5-chloro-2-methylphenylcarbamate)	<b>Lux Cellulose-1</b> Cellulose tris (3,5-dimethylphenylcarbamate)	<b>Lux Cellulose-2</b> Cellulose tris (3-chloro-4-methylphenylcarbamate)	<b>Lux Cellulose-3</b> Cellulose tris (4-methylbenzoate)	<b>Lux Cellulose-4</b> Cellulose tris (4-chloro-3-methylphenylcarbamate)	
Guaranteed Alternative to CHIRALPAK IA® and IA-3	Guaranteed Alternative to CHIRALPAK IG® and IG-3	Guaranteed Alternative to CHIRALPAK IC® and IC-3	Guaranteed Alternative to CHIRALPAK AD®, AD-H®, AD-3, AD-RH®, and AD-3R	Guaranteed Alternative to CHIRALPAK AY®, AY-H®, AY-3, AY-RH, and AY-3R	Guaranteed Alternative to CHIRALCEL® OD®, OD-H®, OD-3, OD-RH®, and OD-3R	Guaranteed Alternative to CHIRALCEL OZ, OZ-H®, OZ-3, OZ-RH, and OZ-3R	Guaranteed Alternative to CHIRALCEL OJ®, OJ-H®, OJ-3, OJ-RH®, and OJ-3R	Guaranteed Alternative to CHIRALCEL OX-H, OX-3, OX-RH, and OX-3R	

## HPLC Screen

### Normal Phase (NP)



## Tip

We suggested initially screening all three immobilized Lux phases because of greater solvent flexibility.

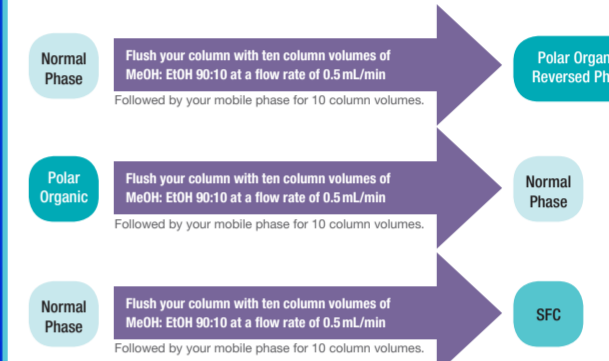
Notes: This screening strategy can be started at any step depending on the properties of the enantiomers. A common dimension used in chiral screening is 250 x 4.6mm. For faster screening, use shorter columns.  
\* Use 0.1 % DEA with basic and neutral compounds and 0.1 % HCOOH with acidic and neutral 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

## Solvent Considerations

### Solvent Switching

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



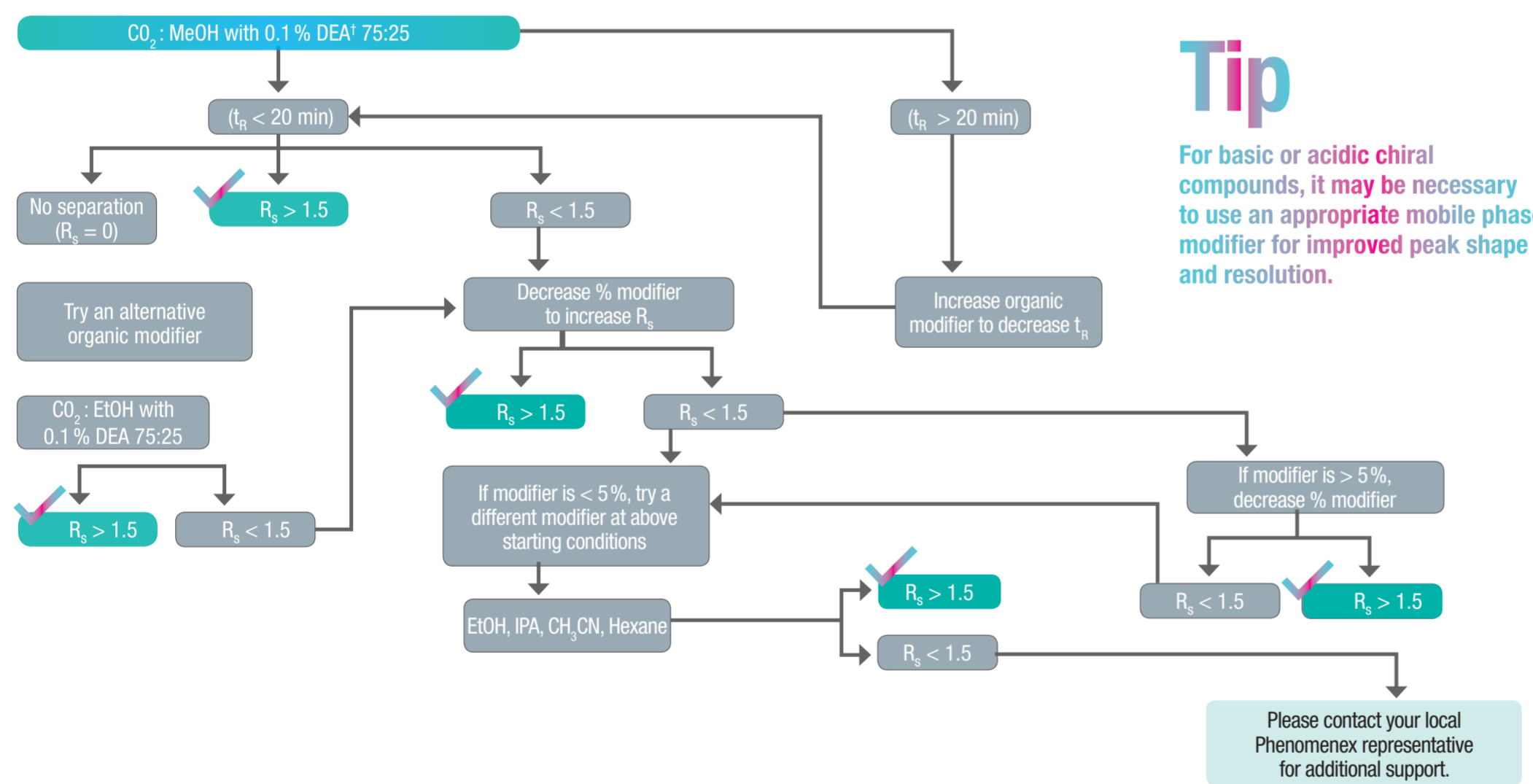
\*\*Once coated phase column is in reversed phase mode, it is not recommended to solvent switch.  
See column care and use notes at [www.phenomenex.com/lux](http://www.phenomenex.com/lux) for more information.

## Why Choose Lux Chiral Columns?



- Stable in normal phase, polar organic, SFC, and reversed phase conditions
- 3 μm and 5 μm packed columns, as well as, 10 μm and 20 μm bulk media for scale up
- Pressure stable up to 300 bar
- High efficiency and loading capacity

## SFC Screen



## Tip

For basic or acidic chiral compounds, it may be necessary to use an appropriate mobile phase modifier for improved peak shape and resolution.

## FREE Chiral Screening

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

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