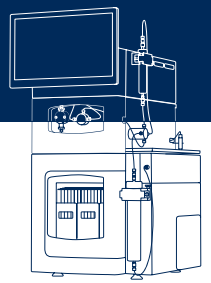
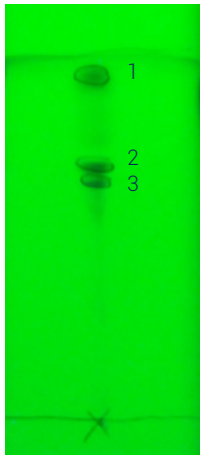
How Genius can help for purification?



1. TLC method development

TLC 1

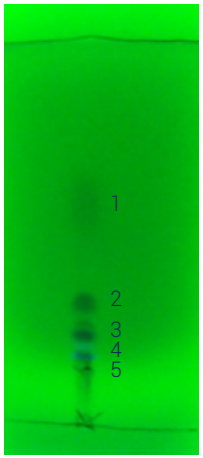


Mobile phase:
87% DCM / MeOH 13%

Compound	Rf	CV
1	0.95	1.05
2	0.68	1.47
3	0.64	1.56

$\Delta CV_{3-2} = 0.09$

TLC 2



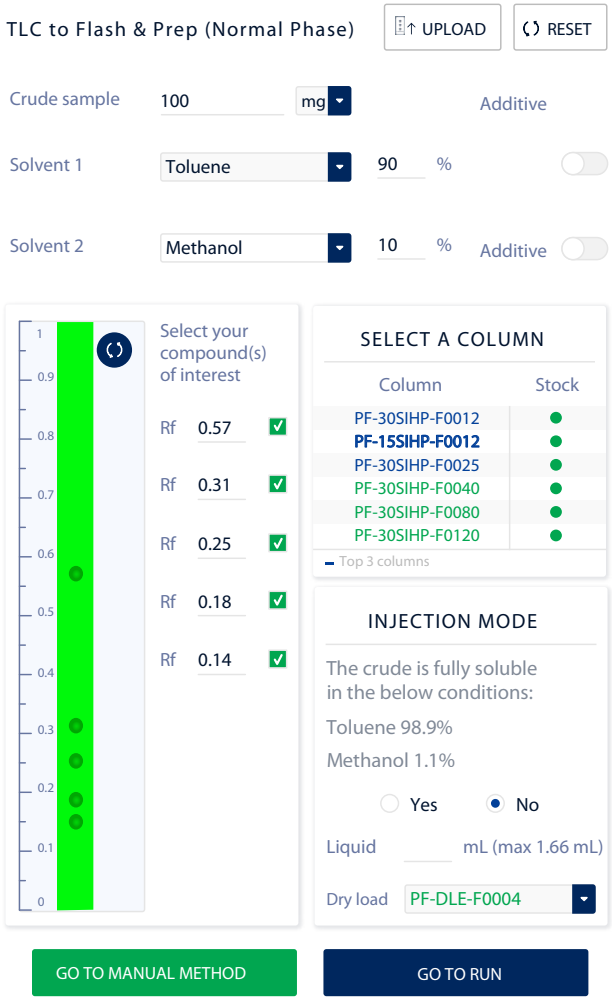
Mobile phase:
90% Toluene / MeOH 10%

Compound	Rf	CV
1	0.57	1.75
2	0.31	3.23
3	0.25	4
4	0.18	5.56
5	0.14	7.14

Rf of compounds 2 and 3 are close, the separation will not be optimal on Flash column.
Genius provide new TLC conditions (TLC 2) in order to increase ΔRf & ΔCV.

2. Genius proposal

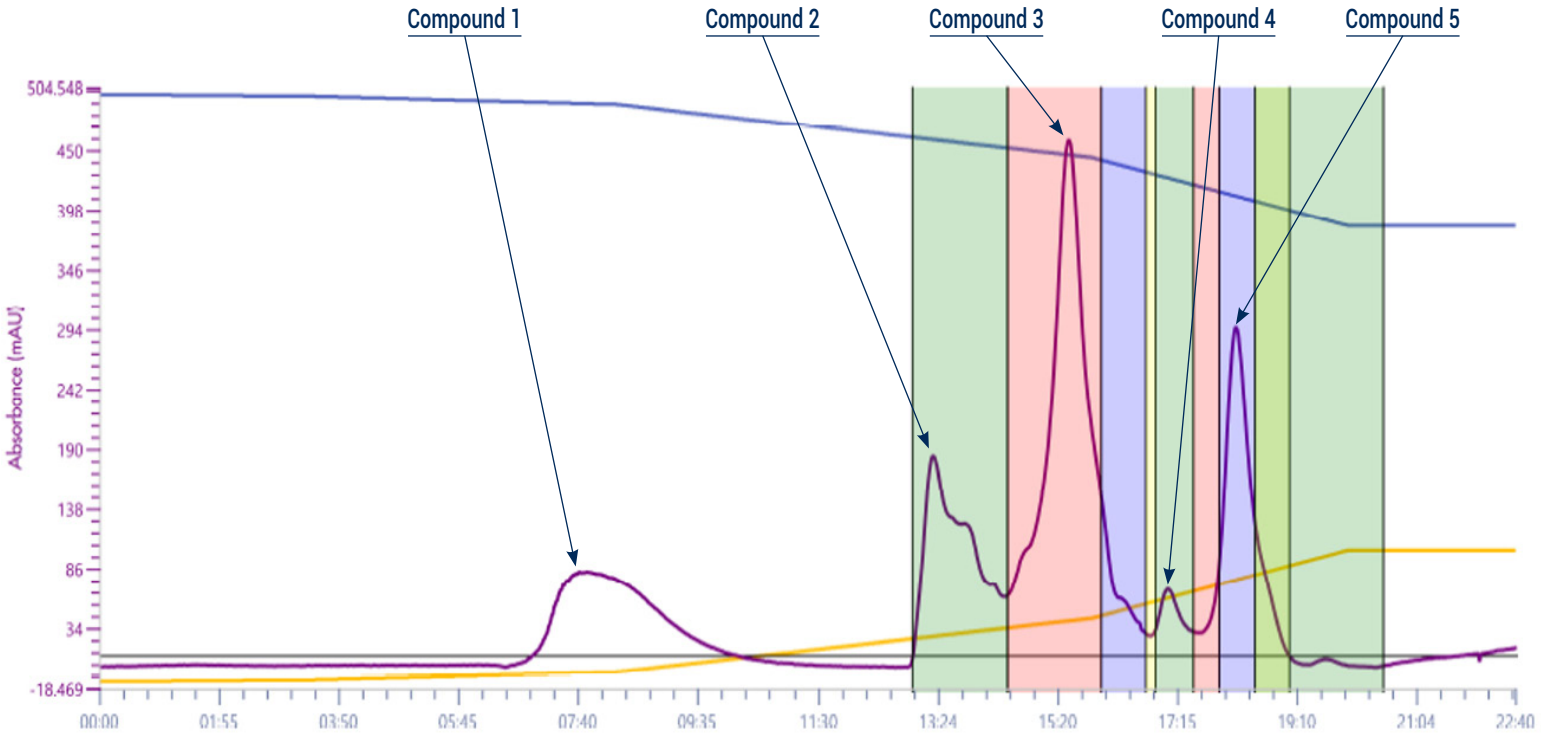
Among the columns proposed by Genius, we have selected a PF-15SIHP-F0012, which was available in stock :



3. Flash conditions

Device: puriFlash® 5.020
Solvents: A: Toluene
B: Methanol
Column: PF-15SIHP-F0012
Flow rate: 15mL/min
Injection mode: Solid deposit with celite (Dry-load F0004)
Crude sample: 100mg
Detection: UV 265nm
Pressure: 4bar
Elution conditions:

t (min)	A (%)	B (%)
00:00	98.9	1.1
03:27	98.6	1.4
08:17	97.3	2.7
15:52	88.4	11.6
20:00	77	23
26:13	77	23



To achieve this purification:

You will need

- puriFlash® 5.020
  Discover it Add to card
- puriFlash® column PF-15SIHP-F0012
  Discover it Add to card
- puriFlash® Dry-load PF-DLE-F0004
  Discover it Add to card

We highly recommend

- Ballasting for 1/8" tubing - 5 units
  DZ7360 Add to card
- Extractor with 2 extraction tubes + Kit
  AYHDZ0 Add to card
- 13x100mm Rack
  AYHE30 Add to card

Download our App

"TLC to Flash & Prep Chromatography" to make your TLC developments easier and faster.

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