

Cannsep columns for cannabinoids



SIELC developed a special line of Cannsep columns to resolve most of the compounds attributed to cannabis physiological properties. Three columns: Cannsep A, Cannsep B, and Cannsep C resolve all the cannabinoids providing different and significantly orthogonal selectivity.

You can quickly setup your own chemical lab for analysis of marijuana products using our specific columns and HPLC method tailored for this analysis.

SIELC developed 3 complementary columns with stationary phases offering different selectivity to different cannabinoids.

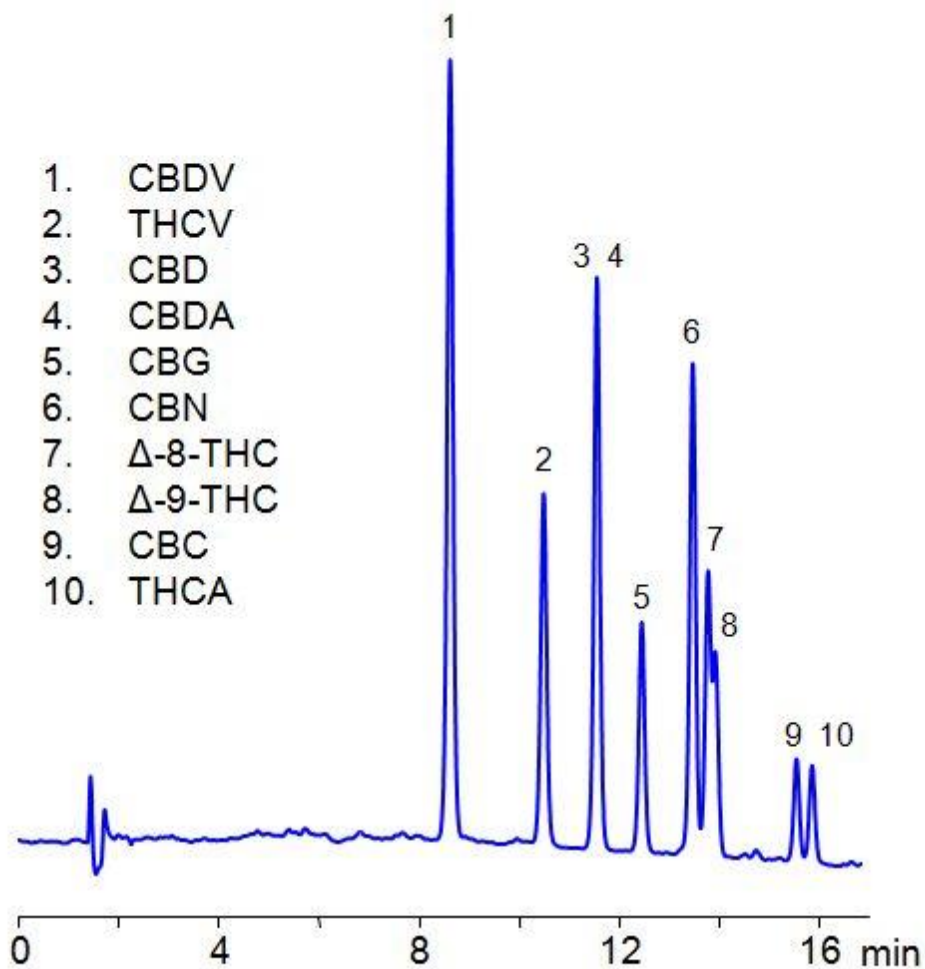
Individual columns and full set of columns can be purchased from SIELC directly.

Columns are available in all standard dimensions and with particles 5 μm for regular HPLC and 3 μm for UPLC (Ultra-high Pressure Liquid Chromatography).

Cannsep A is a reverse-phase analytical column with embedded strong acidic ion-pairing groups.

This stationary phase retains neutral cannabinoids by reverse-phase mechanism. Acidic cannabinoids such as Tetrahydrocannabinolic acid (THCA) and Cannabidiolic Acid (CBDA) will be subject of ion-exclusion with negatively charged stationary phase of Cannsep A.

Mobile phases can be selected to be compatible with low UV detection with phosphoric or sulfuric acid as a modifier. Alternately the LC-MS and preparative chromatography compatible mobile phase can be use with formic acid as a modifier.

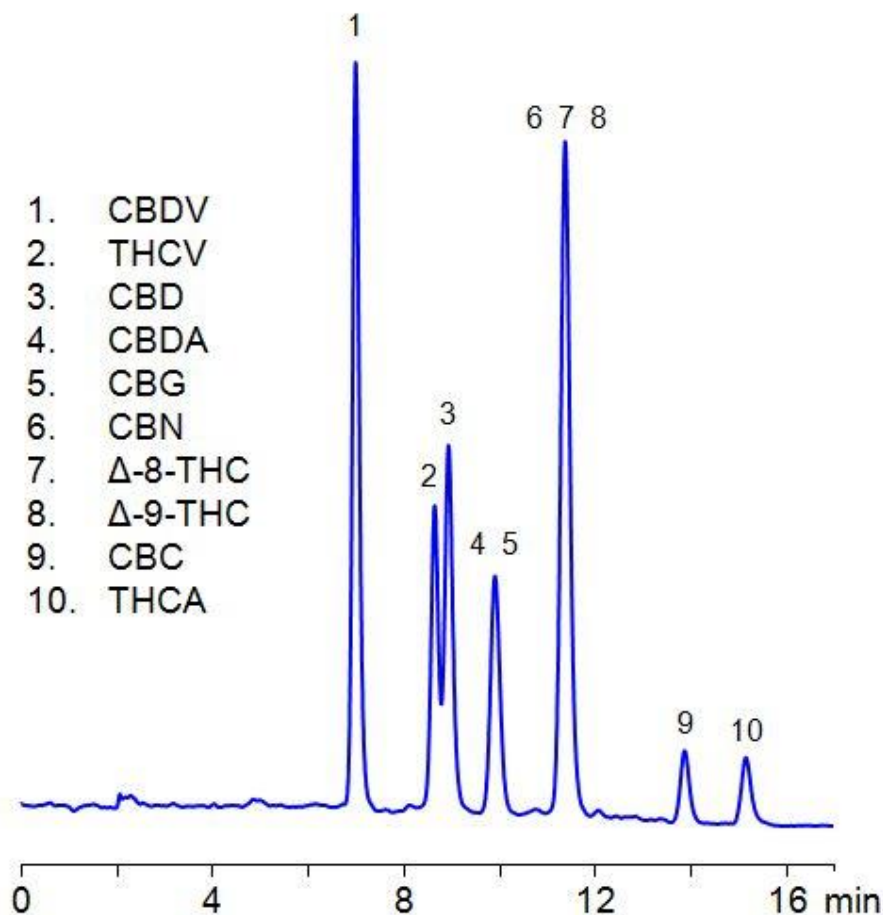


Column:	Cannsep A
Column size:	4.6 × 150 mm, 5 μm
Mobile phase:	MeCN gradient 50-70 in 20 min
Buffer:	H ₂ SO ₄ 0.1 %
Flow rate:	1 mL/min
UV detection:	210 nm

Cannsep B is a reverse-phase analytical column with embedded strong basic ion-pairing groups.

This stationary phase retains neutral cannabinoids by reverse-phase mechanism. Acidic cannabinoids such as Tetrahydrocannabinolic acid (THCA) and Cannabidiolic Acid (CBDA) will be a subject of an ion-exchange with positively charged stationary phase of Cannsep B.

Mobile phases can be selected to be compatible with low UV detection with phosphoric or sulfuric acid as a modifier. Alternately the LC-MS and preparative chromatography compatible mobile phase can be use with formic acid as an ionic modifier.

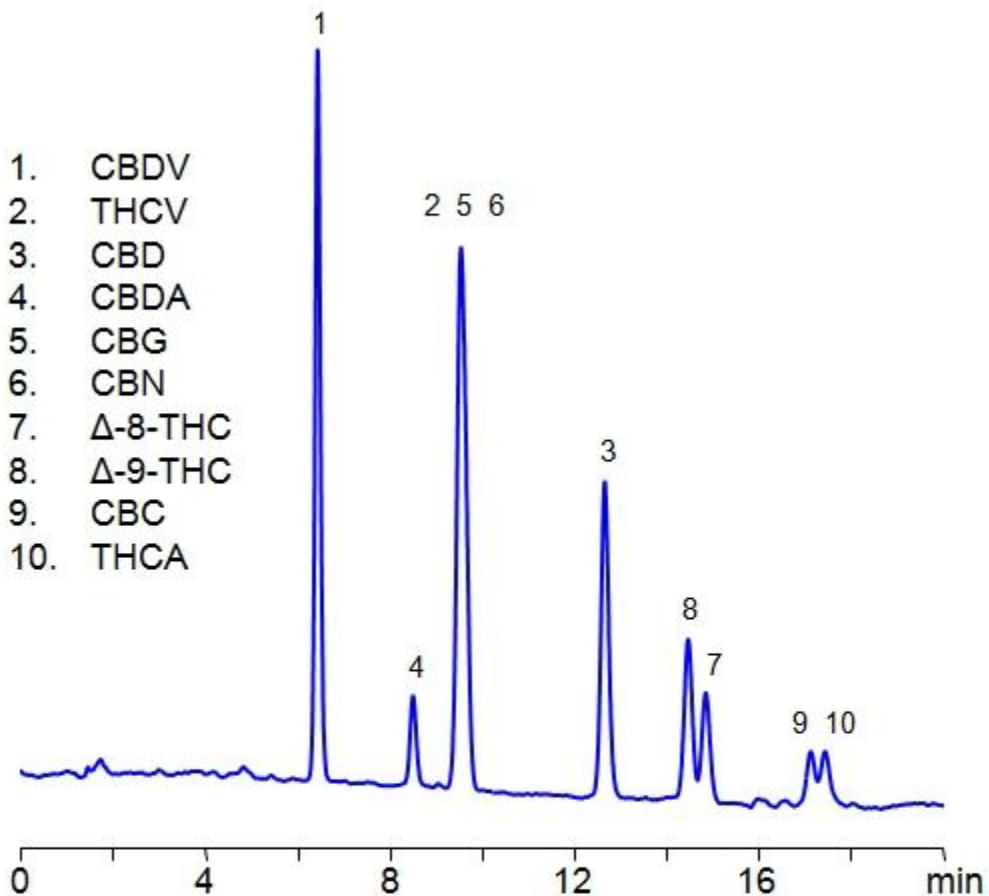


Column:	Cannsep B
Column size:	4.6 × 150 mm, 5 μm
Mobile phase:	MeCN gradient 40-60 in 20 min
Buffer:	H ₂ SO ₄ 0.1 %
Flow rate:	1 mL/min
UV detection:	210 nm

Cannsep C is a reverse-phase analytical column with C18 stationary phase and good endcapping.

This stationary phase retains all the neutral and acidic cannabinoids by reverse-phase mechanism.

Well deactivated silica surface and uniform particles distribution provides good peak symmetry and high column efficiency. Mobile phases can be selected to be compatible with low UV detection with phosphoric or sulfuric acid as a modifier. Alternately the LC-MS and preparative chromatography compatible mobile phase can be use with formic acid as an ionic modifier.



Column:	Cannsep C
Column size:	4.6 × 150 mm, 5 μm
Mobile phase:	MeCN gradient 60-80 in 20 min
Buffer:	H ₂ SO ₄ 0.1 %
Flow rate:	1 mL/min
UV detection:	210 nm