

APPLICATIONS

7 Primary Terpenes in Cannabis by LC-MS/MS



KC Hyland¹, Christopher Borton¹, Paul Winkler¹, Simon Roberts¹, Scott Krepich² and Matthew Noestheden¹

¹ SCIEX, Redwood City, CA

² Phenomenex, Inc., 411 Madrid Ave., Torrance, CA 90501 USA

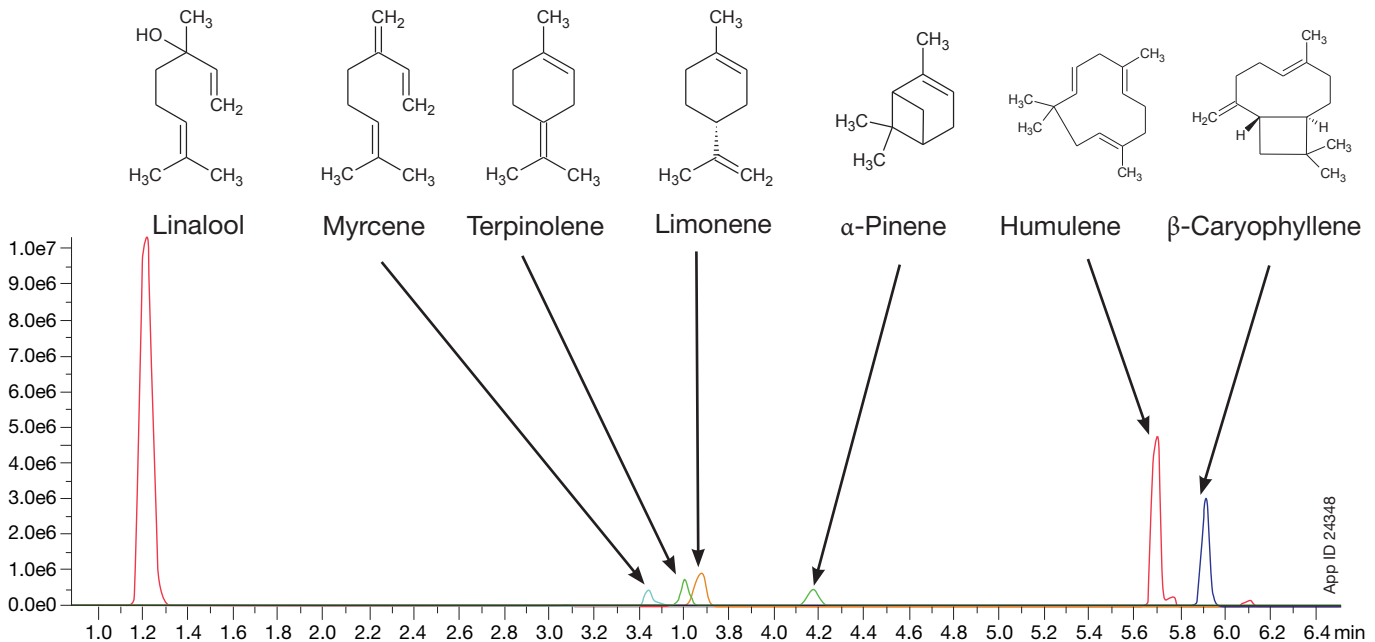
Overview

At least 200 terpenes have been identified in *Cannabis sativa* (cannabis), and many more can be found in other important plant species and products. Unique Cannabis strains and extracts can present varying terpene profiles. A method is shown that uses atmospheric pressure chemical ionization (APCI)-LC-MS/MS, focusing on seven terpenes typically found in cannabis.



LC-MS/MS Conditions

Column:	Kinetex [®] 2.6 μm Biphenyl	
Dimension:	100 x 4.6 mm	
Part No.:	00D-4622-EO	
Mobile Phase:	A: 2 mM Ammonium acetate + 0.1% Formic acid in Water B: 2 mM Ammonium acetate + 0.1% Formic acid in Methanol	
Gradient:	Time (min)	B (%)
	0	50
	3	75
	4	75
	5	95
	6	95
	7	50
	12	50
Flow Rate:	0.55 mL/min	
Injection:	3 μL	
Temperature:	40 °C	
Detection:	MS/MS	
Instrument:	SCIEX 3500 Triple Quad [™] LC-MS	
Analytes:	<ol style="list-style-type: none"> 1. Linalool 2. Myrcene 3. Terpinolene 4. Limonene 5. α-Pinene 6. Humulene 7. β-Caryophyllene 	



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Kinetex Ordering Information

Kinetex 5 µm Columns (mm)		SecurityGuard™ ULTRA Cartridges†		SecurityGuard™ ULTRA Cartridges†		SecurityGuard™ ULTRA Cartridges†		SecurityGuard™ ULTRA Cartridges†	
Phases	50 x 2.1	3/pk	50 x 3.0	3/pk	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	3/pk
Biphenyl	00B-4627-AN	AJO-9209	00B-4627-YO	AJO-9208	00B-4627-E0	00D-4627-E0	00F-4627-E0	00G-4627-E0	AJO-9207
		for 2.1 mm ID		for 3.0 mm ID					for 4.6 mm ID

Kinetex 2.6 µm Columns (mm)		SecurityGuard™ ULTRA Cartridges†		SecurityGuard™ ULTRA Cartridges†		SecurityGuard™ ULTRA Cartridges†		SecurityGuard™ ULTRA Cartridges†	
Phases	50 x 2.1	100 x 2.1	3/pk	50 x 3.0	3/pk	50 x 4.6	100 x 4.6	150 x 4.6	3/pk
Biphenyl	00B-4622-AN	00D-4622-AN	AJO-9209	00B-4622-YO	AJO-9208	00B-4622-E0	00D-4622-E0	00F-4622-E0	AJO-9207
			for 2.1 mm ID		for 3.0 mm ID				for 4.6 mm ID

Kinetex 1.7 µm Minibore Columns (mm)				SecurityGuard™ ULTRA Cartridges†
Phases	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
Biphenyl	00B-4628-AN	00D-4628-AN	00F-4628-AN	AJO-9209
				for 2.1 mm ID

† SecurityGuard ULTRA cartridges require holder, Part No. AJO-9000.

Australia

t: +61 (0)2-9428-6444
f: +61 (0)2-9428-6445
auiinfo@phenomenex.com

Austria

t: +43 (0)1-319-1301
f: +43 (0)1-319-1300
anfrage@phenomenex.com

Belgium

t: +32 (0)2 503 4015 (French)
t: +32 (0)2 511 8666 (Dutch)
f: +31 (0)30-2383749
beinfo@phenomenex.com

Canada

t: +1 (800) 543-3681
f: +1 (310) 328-7768
info@phenomenex.com

China

t: +86 400-606-8099
f: +86 (0)22 2532-1033
phen@agela.com

Denmark

t: +45 4824 8048
f: +45 4810 6265
nordicinfo@phenomenex.com

Finland

t: +358 (0)9 4789 0063
f: +45 4810 6265
nordicinfo@phenomenex.com

France

t: +33 (0)1 30 09 21 10
f: +33 (0)1 30 09 21 11
franceinfo@phenomenex.com

Germany

t: +49 (0)6021-58830-0
f: +49 (0)6021-58830-11
anfrage@phenomenex.com

India

t: +91 (0)40-3012 2400
f: +91 (0)40-3012 2411
indiainfo@phenomenex.com

Ireland

t: +353 (0)1 247 5405
f: +44 1625-501796
eireinfo@phenomenex.com

Italy

t: +39 051 6327511
f: +39 051 6327555
italiainfo@phenomenex.com

www.phenomenex.com

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Luxembourg

t: +31 (0)30-2418700
f: +31 (0)30-2383749
nlinfo@phenomenex.com

Mexico

t: 01-800-844-5226
f: 001-310-328-7768
tecnicomx@phenomenex.com

The Netherlands

t: +31 (0)30-2418700
f: +31 (0)30-2383749
nlinfo@phenomenex.com

New Zealand

t: +64 (0)9-4780951
f: +64 (0)9-4780952
nzinfo@phenomenex.com

Norway

t: +47 810 02 005
f: +45 4810 6265
nordicinfo@phenomenex.com

Puerto Rico

t: +1 (800) 541-HPLC
f: +1 (310) 328-7768
info@phenomenex.com

Spain

t: +34 91-413-8613
f: +34 91-413-2290
espinfo@phenomenex.com

Sweden

t: +46 (0)8 611 6950
f: +45 4810 6265
nordicinfo@phenomenex.com

United Kingdom

t: +44 (0)1625-501367
f: +44 (0)1625-501796
ukinfo@phenomenex.com

USA

t: +1 (310) 212-0555
f: +1 (310) 328-7768
info@phenomenex.com

All other countries Corporate Office USA

t: +1 (310) 212-0555
f: +1 (310) 328-7768
info@phenomenex.com



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