

PHYTOR

Consulting in Human Health, Toxicology & Regulatory Affairs

Phytor Ltd.

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Glabridin determination using UPLC

Client: The 123 diet

Instrument: Ultra-Performance Liquid Chromatography of Waters with PDA
and MS detector

Chromatographic conditions:

Column: ACQUITY UPLC BEH C18/(50 x 2.1 mm, 1.7 μ m),
Waters

Mobile phase: A: 0.1% formic acid in water
B: 0.1% formic acid in acetonitrile

Gradient conditions:

#	Time (mins)	A %	B %
1	0	90	10
2	10	20	80
3	11	0	100
4	14	0	100
5	15	90	10
6	18	90	10

Flow rate: 0.4 mL/min

Detection scanning from 210-500 nm using PDA
full-scan using electrospray ionization (+ ve & -ve),
range of 170-1100 Da.

Injection volume 1 μ L

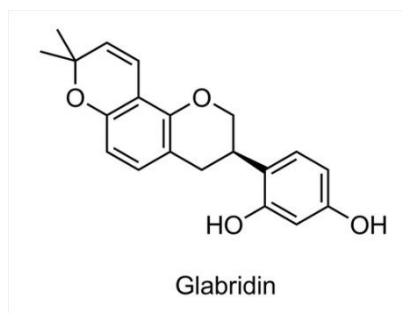
Column temperature: 40°C

Sample temperature 25°C

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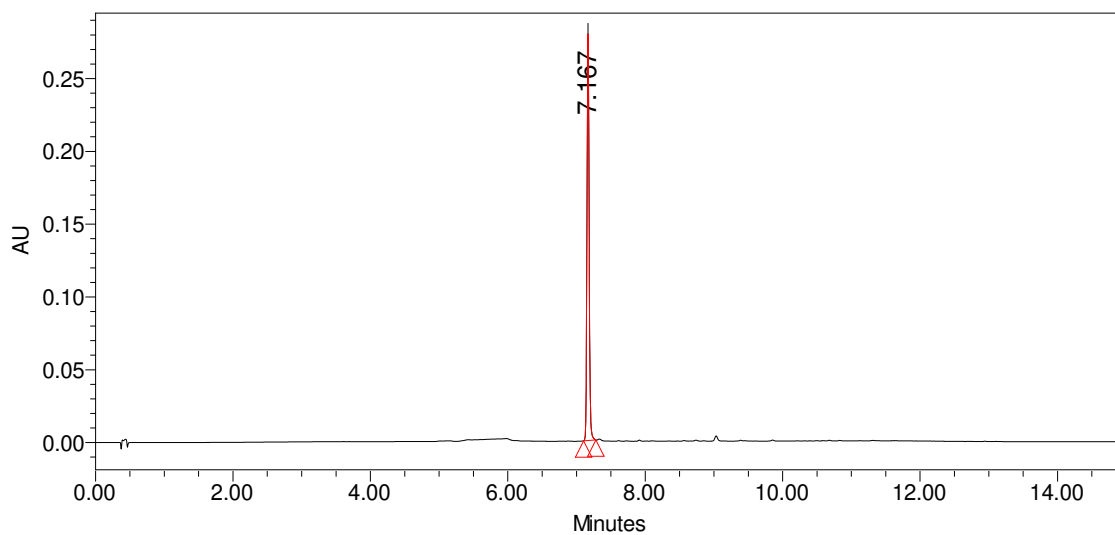
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Chemical formula: $C_{20}H_{20}O_4$
MW = $324.376 \text{ g}\cdot\text{mol}^{-1}$

Glabridin standard (at 280 nm):

(0.1mg/ml) = 100 ppm



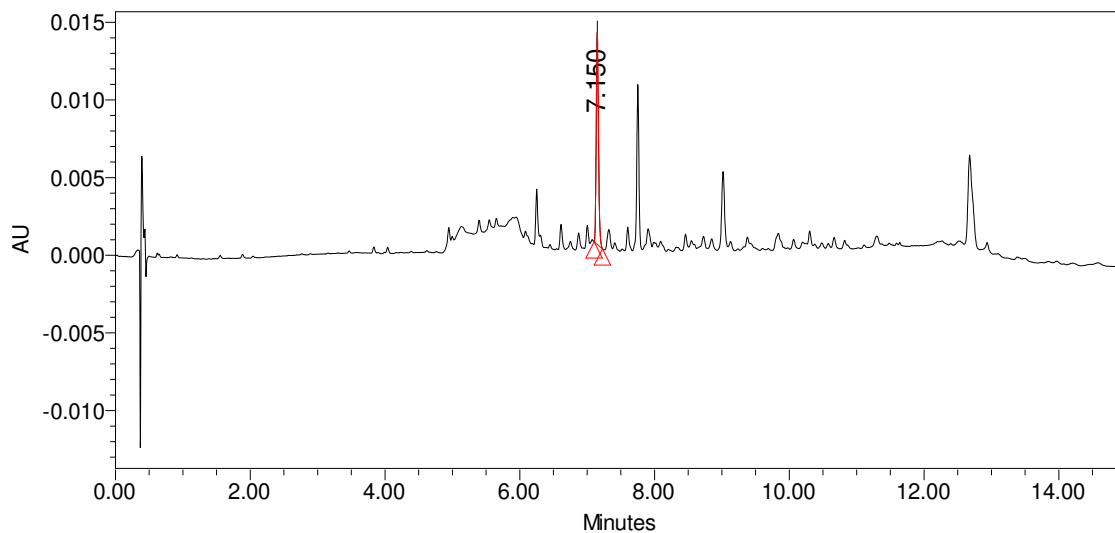
	Name	Retention Time	Area	% Area	Amount	Units
1	Glabridin	7.167	612485	100.00	100	ppm

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123 sample ליקוריץ פלוס:



	Name	Retention Time	Area	% Area	Amount	Units
1	Glabridin	7.150	31510	100.00	5.144	ppm

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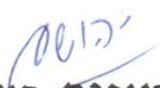
Summary of the results:

Sample	Glabridin (% w/w)	Glycyrrhizin
: ליקוריץ פלוס 123 אצווה B010120	5.14 %	Negligible

Sample	Glabridin (per capsule)	Glycyrrhizin (per capsule)
: ליקוריץ פלוס 123 אצווה B010120	10.28 mg	Negligible

ד"ר יהושע מאור, PhD

יועץ בכיר בטוקסיקולוגיה ופרמקולוגיה


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