

PHYTOR

Consulting in Human Health, Toxicology & Regulatory Affairs

Phytor Ltd.

Consultant: Dr. Yehoshua Maor (Ph.D, M.Sc.,B.Pharm.)

JBP Building – Ein Kerem Campus

9112001 Jerusalem – ISRAEL

Phone: +972-2-502-5229

Fax: +972-153-2-6711-911

e-mail: phytor1@gmail.com

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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

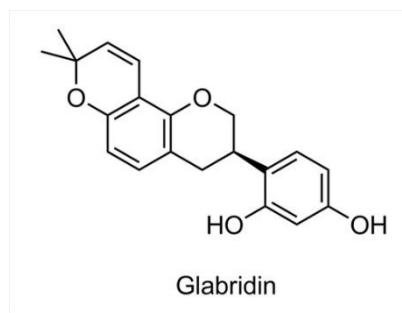
Flow rate: 0.4 mL/min

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

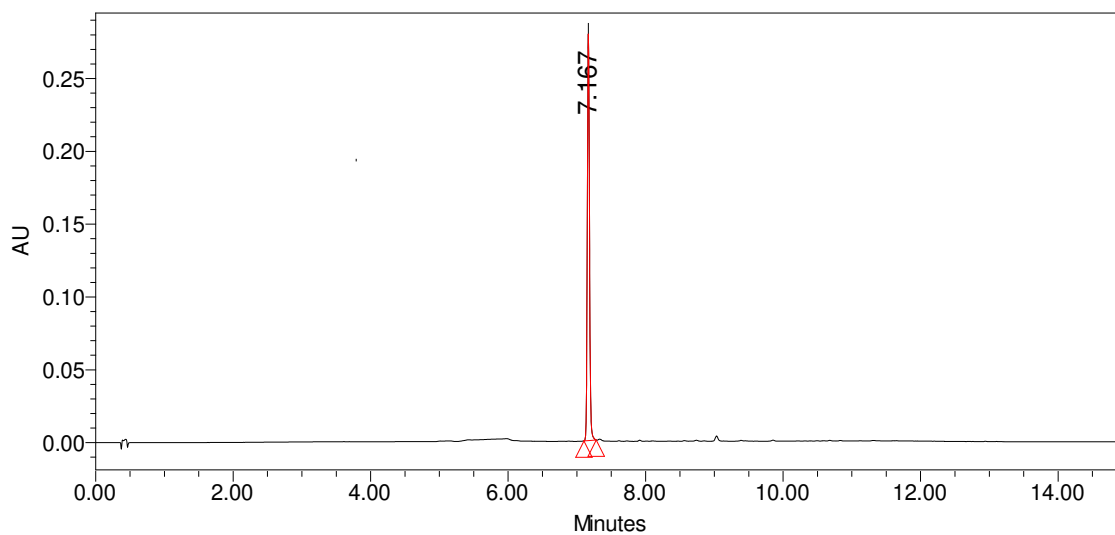
Sample temperature 25°C



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

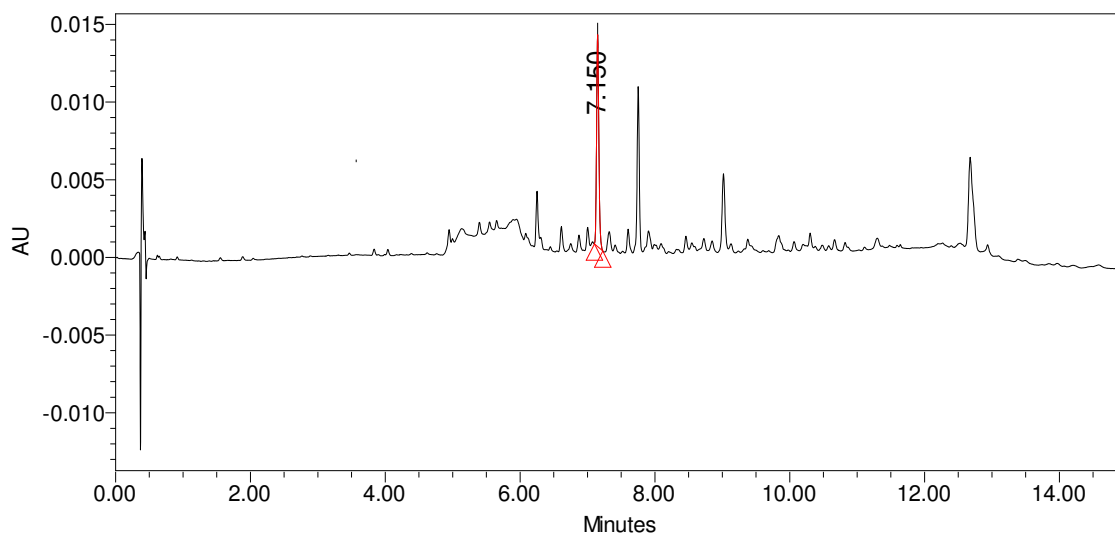
Glabridin standard (at 280 nm):

(0.1mg/ml) = 100 ppm



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

123 sample ליקוריץ פלוס:



	Name	Retention Time	Area	% Area	Amount	Units
1	Glabridin	7.150	31608	100.00	5.160	ppm

PHYTOR Ltd.
JBP Building – Ein Kerem Campus
JERUSALEM 9112001 ISRAEL



TEL: + 972 2 5025229
FAX: +972 1532 6711911
phytor1@gmail.com

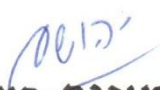
Summary of the results:

Sample	Glabridin (% w/w)	Glycyrrhizin
: ליקוריץ פלוס 123 אצווה B050320	5.16 %	Negligible

Sample	Glabridin (per capsule)	Glycyrrhizin (per capsule)
: ליקוריץ פלוס 123 אצווה B050320	10.32 mg	Negligible

ד"ר יהושע מאור, PhD

יועץ בכיר בטוקסיקולוגיה ופרמקולוגיה


פיטאור בע"מ
514486240 .פ.ח
PHYTOR LTD.