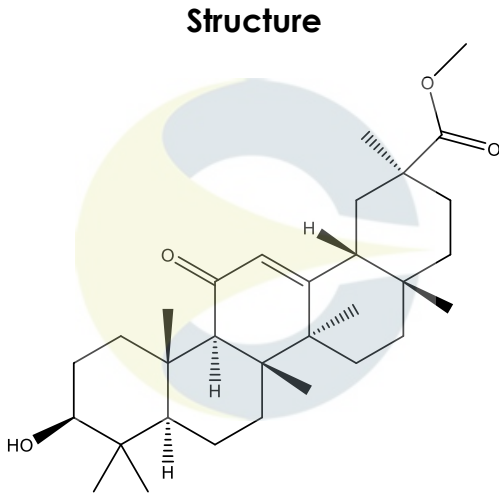


Certificate of Analysis

For Laboratory Use Only

PRODUCT NAME	18-beta-Glycyrrhetic acid methylester	 <p>Structure</p>
PART NUMBER	00007372	
STANDARD TYPE	Analytical Standard (AS)	
LOT NUMBER	00007372-612	
REPORT NUMBER	CDXA-RSS-51 12-01	
SAMPLE NUMBER	CDXA-12-3888	
DATE OF SAMPLE	06/19/2012	
DATE OF RE-EVALUATION	02/18/2021	
DATE OF REPORT	03/04/2021	

CHEMICAL NAMES	18-beta-Glycyrrhetic acid methylester; 3β-Hydroxy-11-oxo-olean-12-en-30-oic acid methyl ester; Methyl 18β-glycyrrhetate; Methyl 18β-glycyrrhetinate; Methyl glycyrrhetate; Methyl glycyrrhetinate
CHEMICAL FORMULA	C ₃₁ H ₄₈ O ₄
MOLECULAR WEIGHT (MW)	484.72
CHEMICAL FAMILY	Triterpenes
CAS NUMBER	[1477-44-7]
EC#(EINECS)	N/A
RTECS	RK0256000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
HPLC	0.700.10.2.METH22	≥ 75%	97.7%
Mass Spectrum	Direct Infusion, ESI (+)	Conforms	Conforms
Appearance	NA	NA	White powder

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	02/2026 under the above conditions.

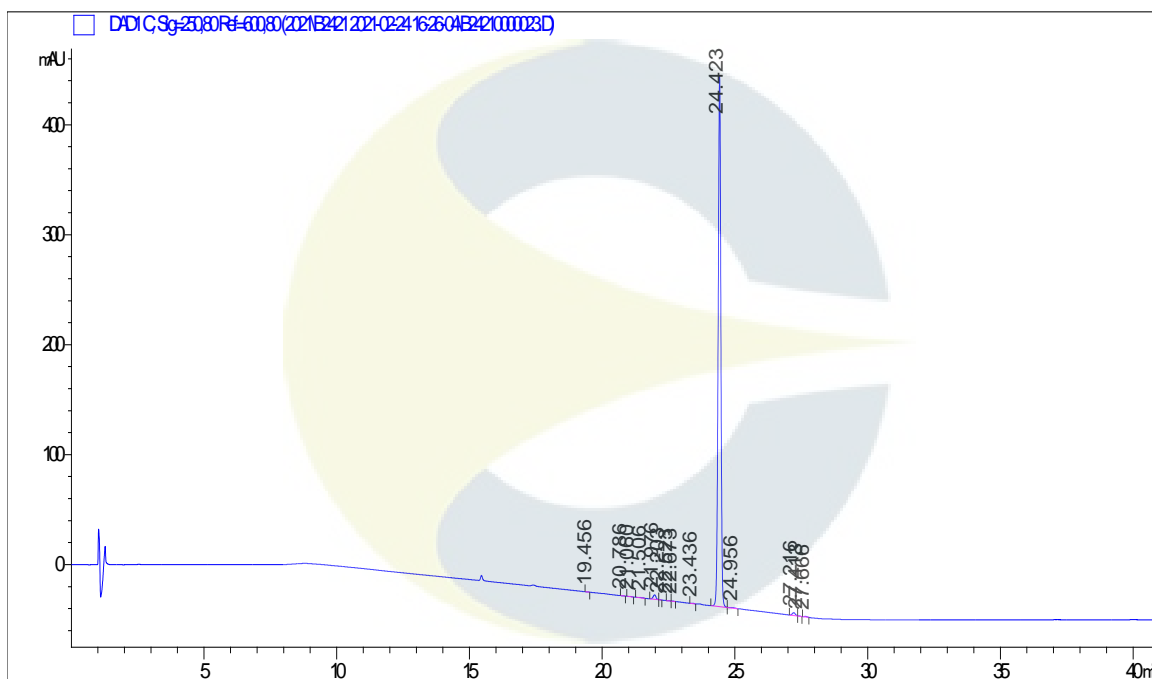
This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

Certificate of Analysis

For Laboratory Use Only

ANALYTICAL CONDITIONS

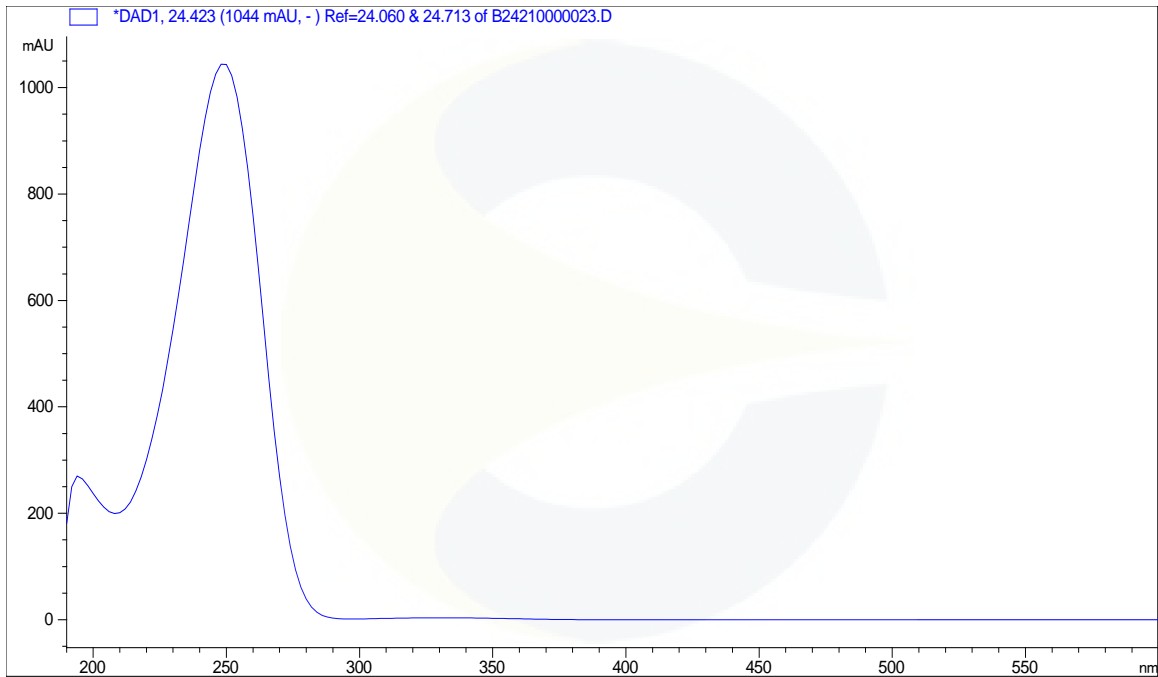
INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	2.0 µL
INJECTION CONC.	0.96 mg/mL in Methanol
DETECTION	250 ± 40 nm

HPLC CHROMATOGRAM OF 18-BETA-GLYCYRRHETINIC ACID METHYLESTER (CDXA-12-3888)


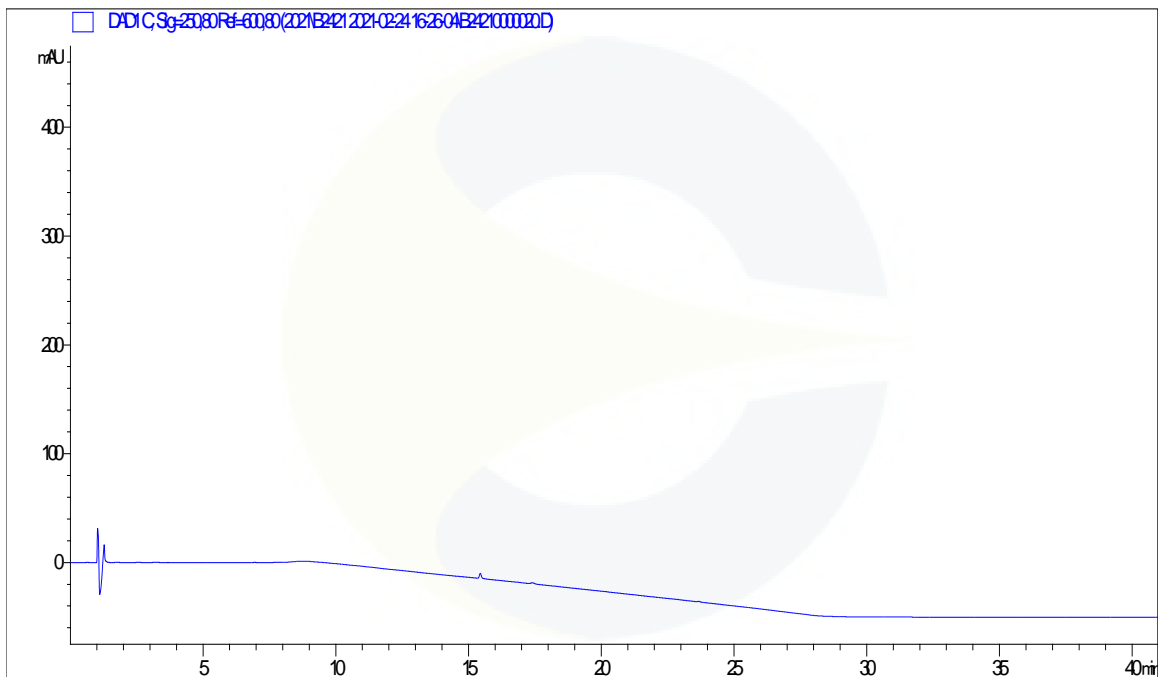
This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

Certificate of Analysis For Laboratory Use Only

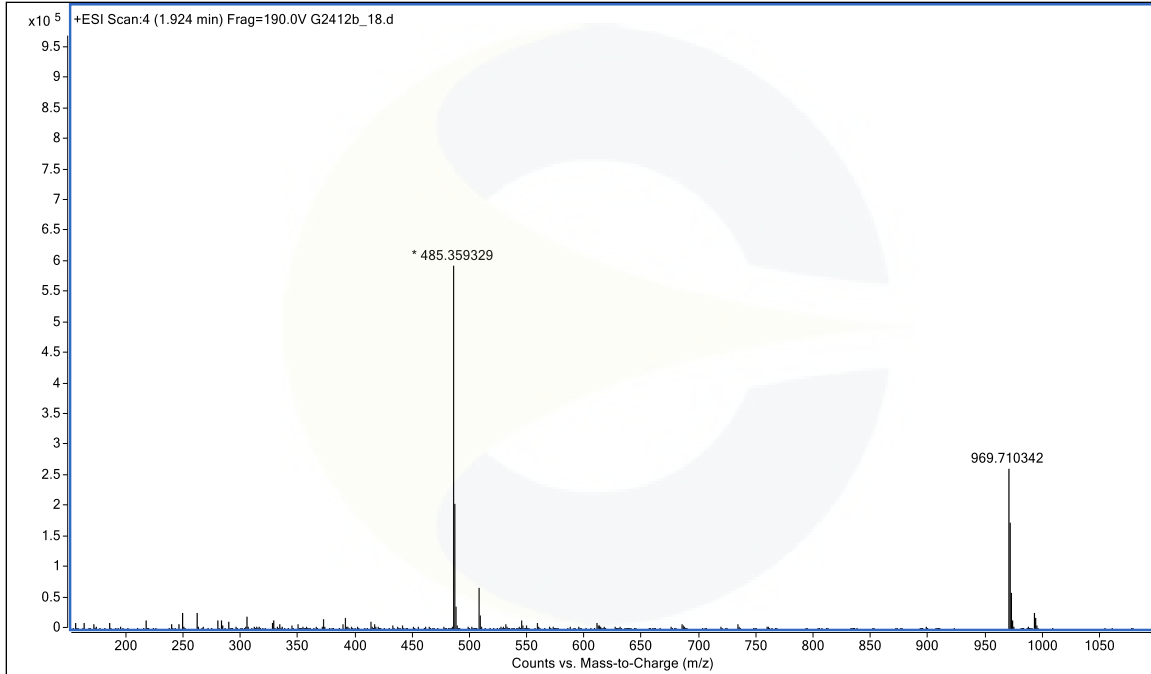
UV SPECTRUM AT 24.4 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK



This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

MASS SPECTRUM OF 18-BETA-GLYCYRRHETINIC ACID METHYLESTER (CDXA-12-3888)

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	08/08/2012	New report
01	03/04/2021	Material passed reevaluation by HPLC. Updated analytical results, analytical conditions, chromatograms, and expiration date. Removed melting point.

This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.