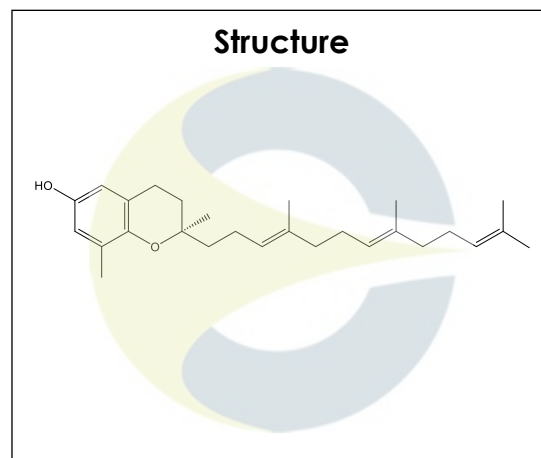


Certificate of Analysis
For Laboratory Use Only

PRODUCT NAME	D-delta-Tocotrienol
PART NUMBER	00020327
STANDARD TYPE	Primary (P)
LOT NUMBER	00020327-333
[¹/REPORT NUMBER	CDXA-RSS-10072-00
SAMPLE NUMBER	CDXP-23-00064
DATE OF SAMPLE	01/25/2023
DATE OF REPORT	02/10/2023



CHEMICAL NAMES	δ-Tocotrienol; (R)-δ-Tocotrienol; (2R)-3,4-Dihydro-2,8-dimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrien-1-yl]-2H-1-benzopyran-6-ol
CHEMICAL FORMULA	C ₂₇ H ₄₀ O ₂
MOLECULAR WEIGHT (MW)	396.61
CHEMICAL FAMILY	Tocotrienols
CAS NUMBER	[25612-59-3]
EC#(EINECS)	607-758-7
RTECS	DJ2882000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	98.8%
HPLC	0.700.10.2.METH38	≥ 90%	98.9%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Ethyl Acetate – 531 ppm
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Oil

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 98.8% IS BASED ON (100 - 0.1 SOLVENTS - 0.0 WATER) X 98.9% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	01/2028 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.

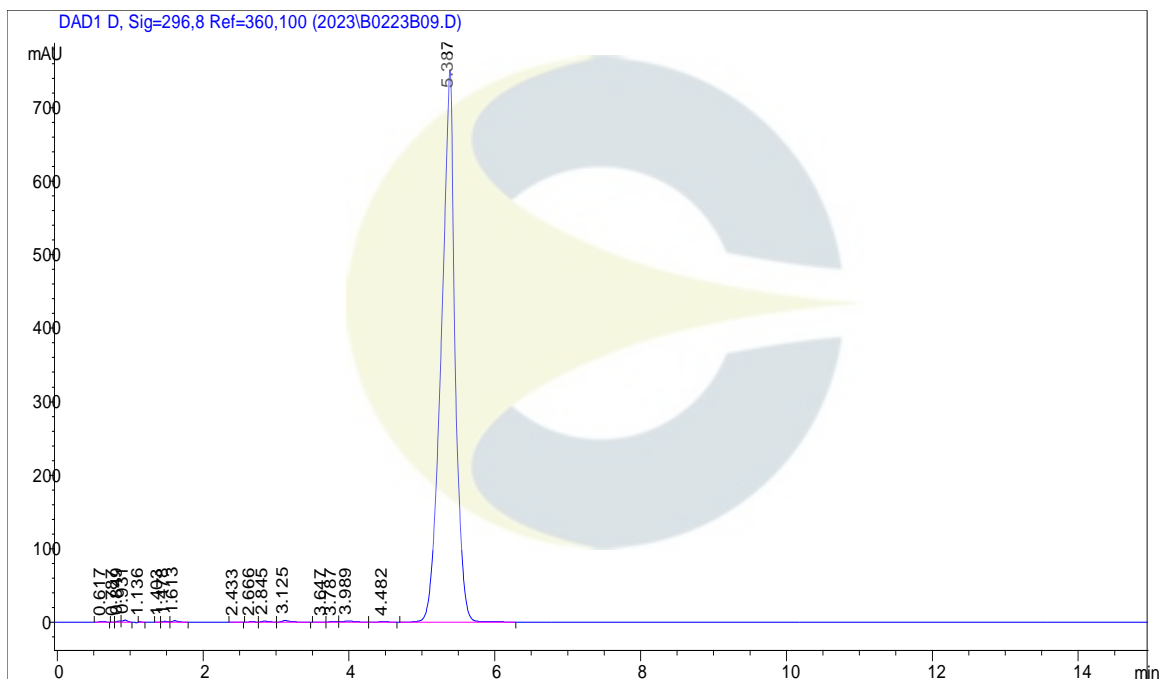
Certificate of Analysis

For Laboratory Use Only

ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
COLUMN	Phenomenex Luna Silica(2) 150 x 2.00 mm, 3 µm particle size
MOBILE PHASE	A - 0.2% IPA and 0.8% HOAc in n-Hexane Isocratic 100% A for 15 minutes.
COLUMN TEMP.	35 °C
FLOW RATE	0.8 mL/minute
INJECTION VOL.	15.0 µL
INJECTION CONC.	1.0 mg/mL in n-Hexane
DETECTION	296 ± 4 nm

HPLC CHROMATOGRAM OF D-DELTA-TOCOTRIENOL (CDXP-23-00064)

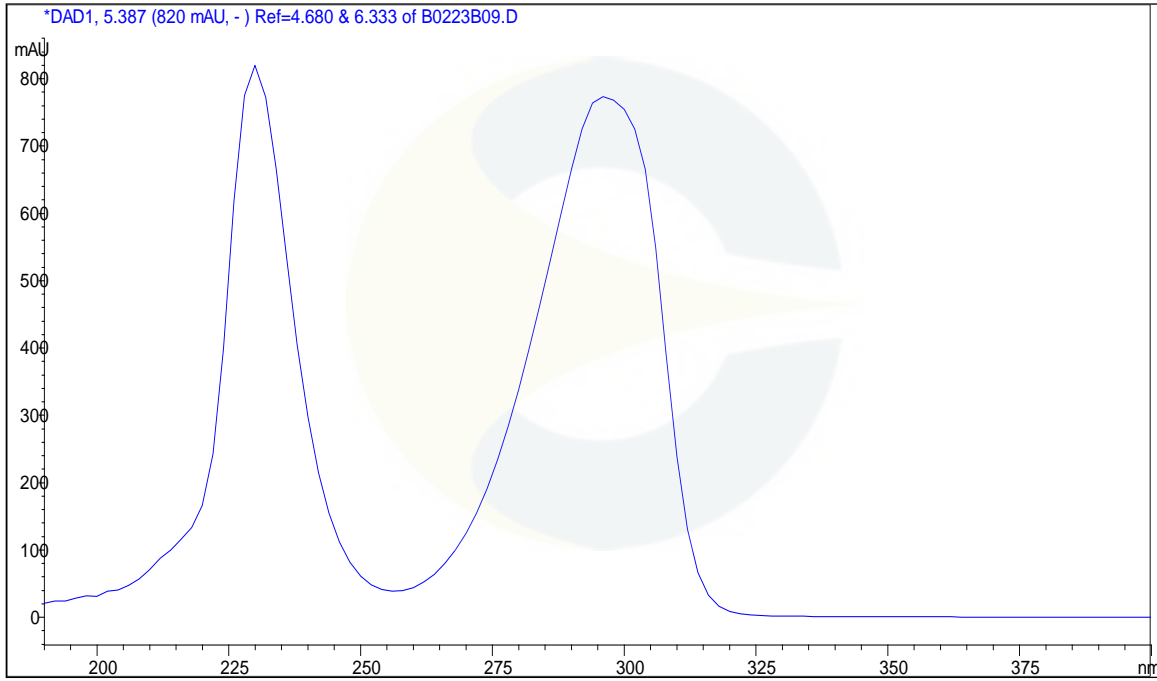


This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

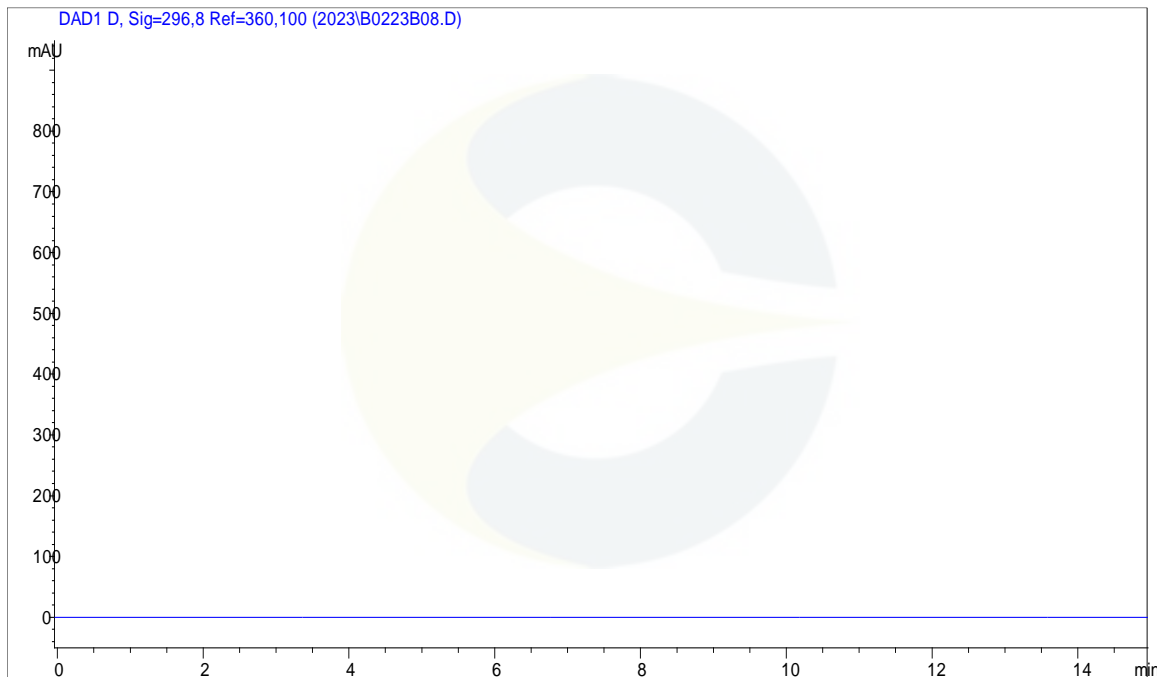
Certificate of Analysis

For Laboratory Use Only

UV SPECTRUM AT RT = 5.4 MINUTES



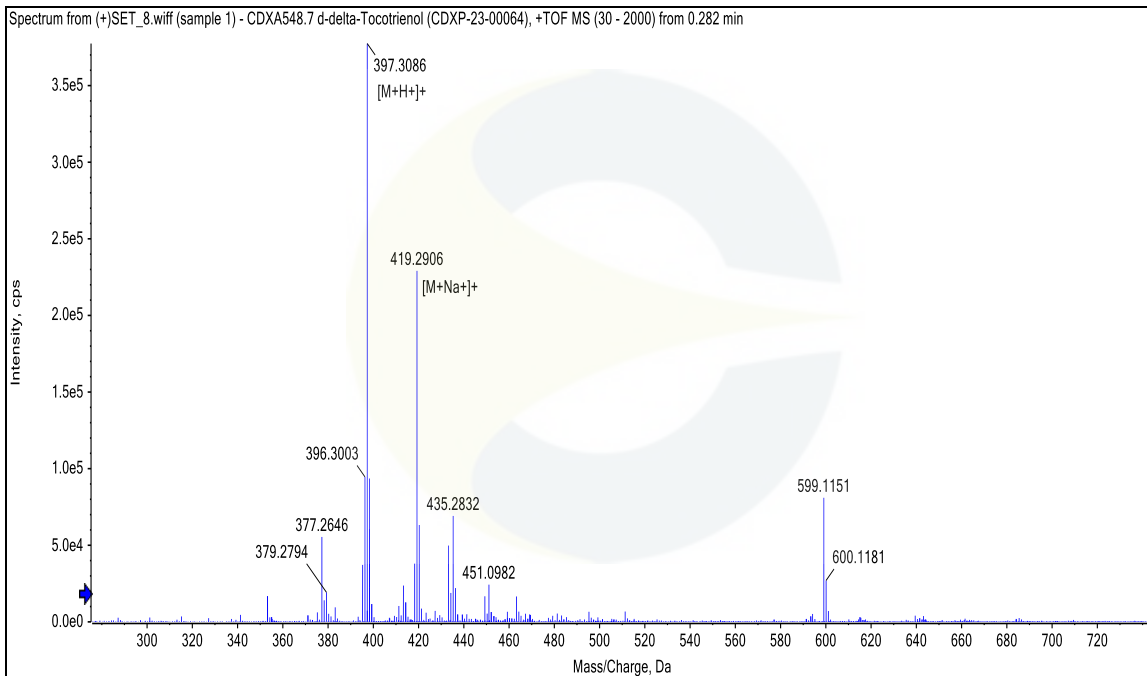
HPLC CHROMATOGRAM OF DILUENT BLANK



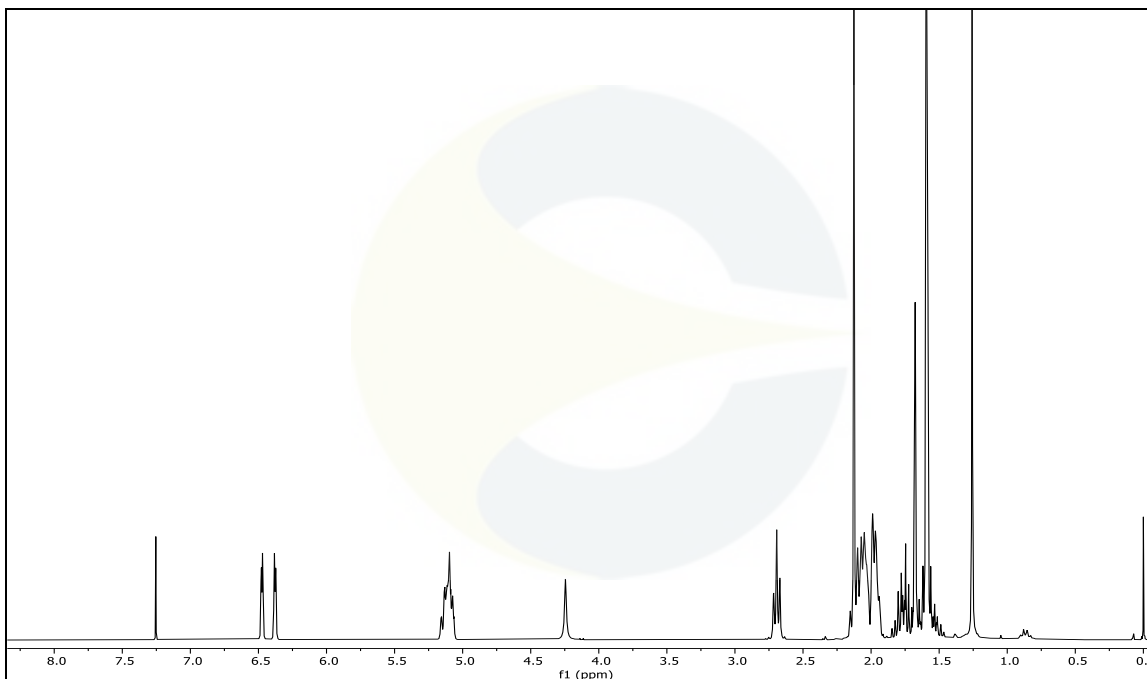
This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

Certificate of Analysis
For Laboratory Use Only

MASS SPECTRUM OF D-DELTA-TOCOTRIENOL (CDXP-23-00064)

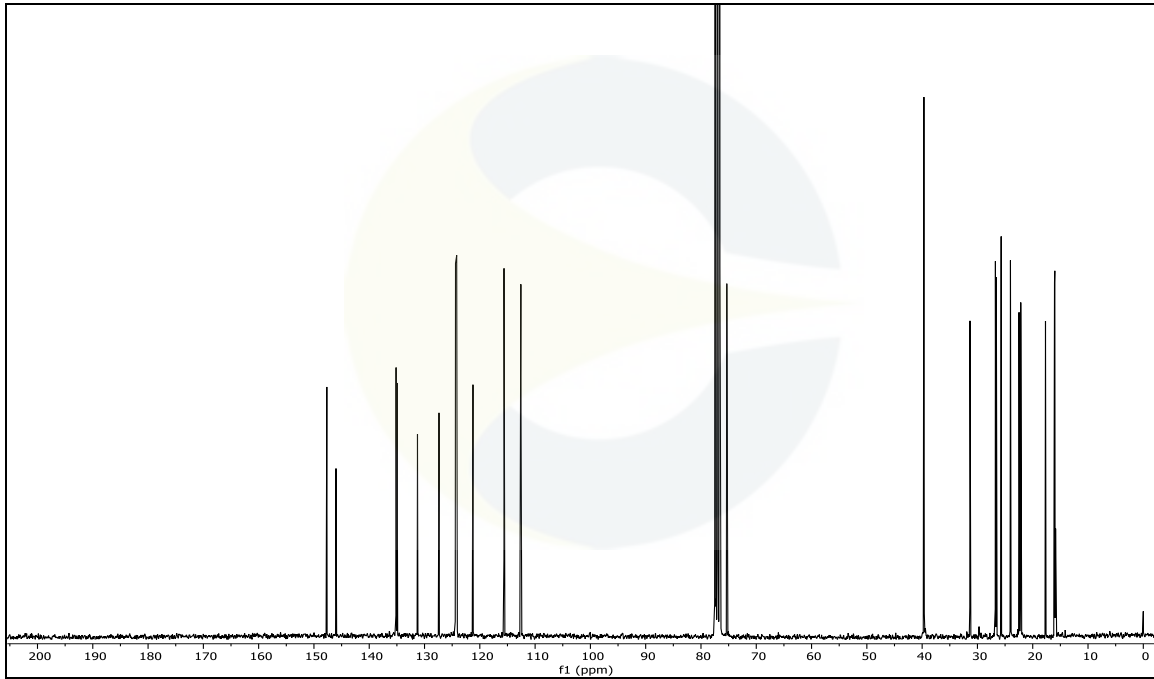


¹H-NMR SPECTRUM OF D-DELTA-TOCOTRIENOL (CDXP-23-00064) IN CDCl₃ + TMS

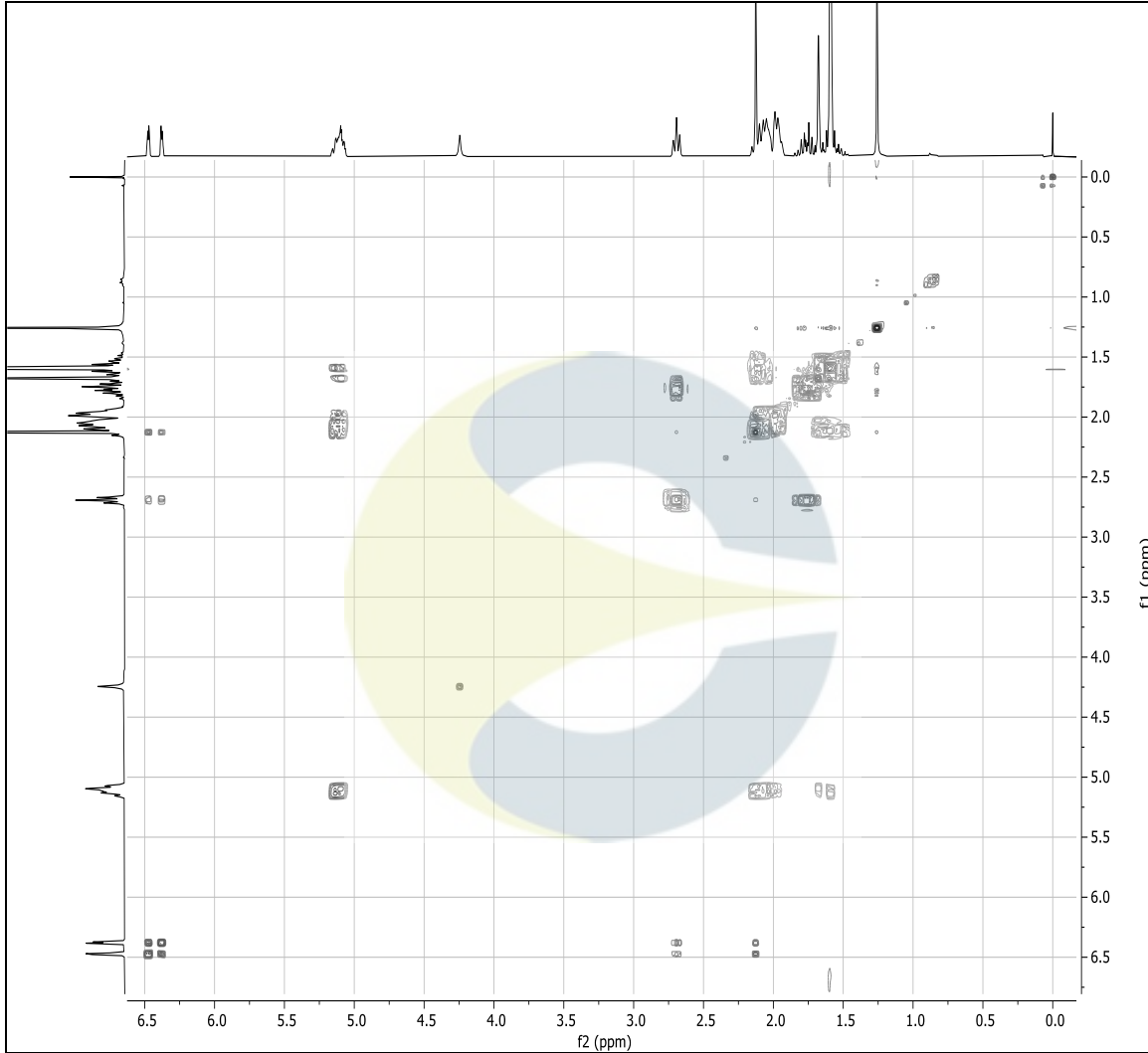


This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

¹³C-NMR SPECTRUM D-DELTA-TOCOTRIENOL (CDXP-23-00064) IN CDCl₃ + TMS



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
COSY-NMR SPECTRUM OF D-DELTA-TOCOTRIENOL (CDXP-23-00064) IN CDCl₃ + TMS

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	02/10/2023	New report

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.