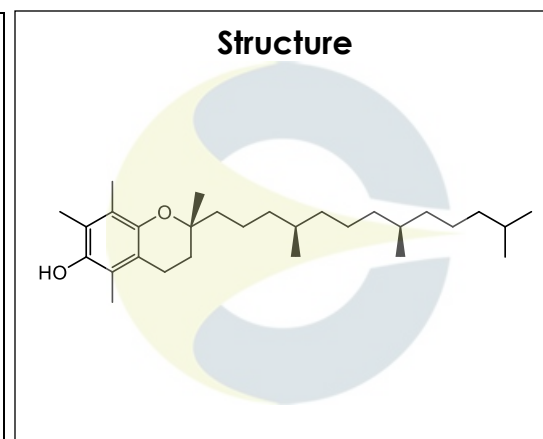


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PRODUCT NAME	D-alpha-Tocopherol
PART NUMBER	00020311
STANDARD TYPE	Primary (P)
LOT NUMBER	00020311-001
REPORT NUMBER	CDXA-RSS-9114-00
SAMPLE NUMBER	CDXP-20-00572
DATE OF SAMPLE	07/30/2020
DATE OF REPORT	08/24/2020



CHEMICAL NAMES	(2R)-3,4-Dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-2H-1-benzopyran-6-ol; (+)- α -Tocopherol; 5,7,8-Trimethyltocol; α -Vitamin E
CHEMICAL FORMULA	C ₂₉ H ₅₀ O ₂
MOLECULAR WEIGHT (MW)	430.71
CHEMICAL FAMILY	Vitamins
CAS NUMBER	[59-02-9]
EC#(EINECS)	200-412-2
RTECS	DJ2900000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	99.7%
HPLC	See below	NA	99.7%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	ND
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Colorless oil

*Testing performed at an ISO 17025 accredited subcontracted laboratory.
 ADJUSTED PURITY: 99.7% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 99.7% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	07/2025 under the above conditions.

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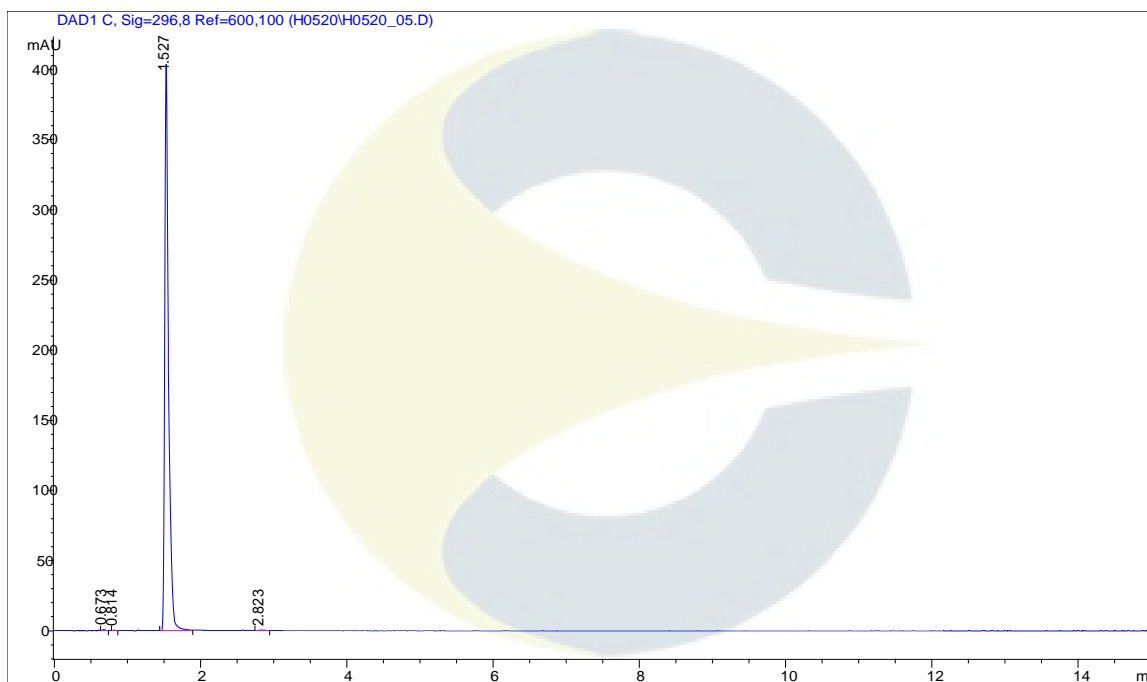
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ANALYTICAL CONDITIONS

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	0.2% Isopropyl alcohol + 0.8% Acetic acid in n-Hexane Isocratic for 15 minutes.
COLUMN TEMP.	35 °C
FLOW RATE	0.8 mL/minute
INJECTION VOL.	1.0 µL
INJECTION CONC.	2.5 mg/mL in n-Hexane
DETECTION	296 ± 4 nm

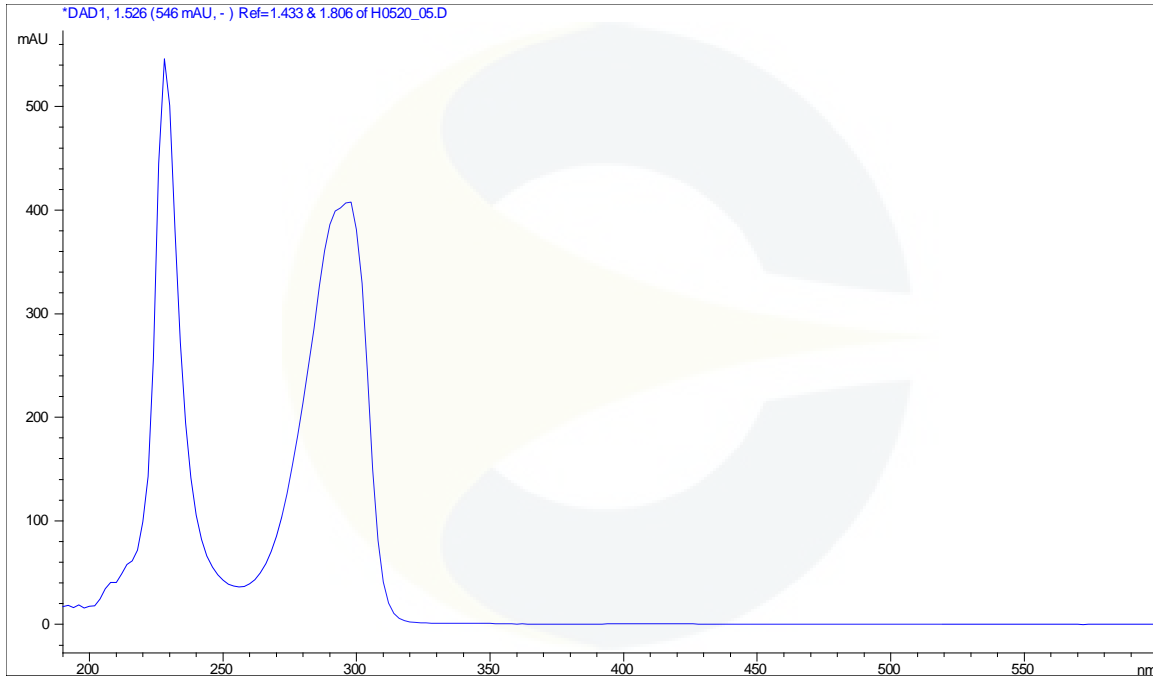
HPLC CHROMATOGRAM OF D-ALPHA-TOCOPHEROL (CDXP-20-00572)



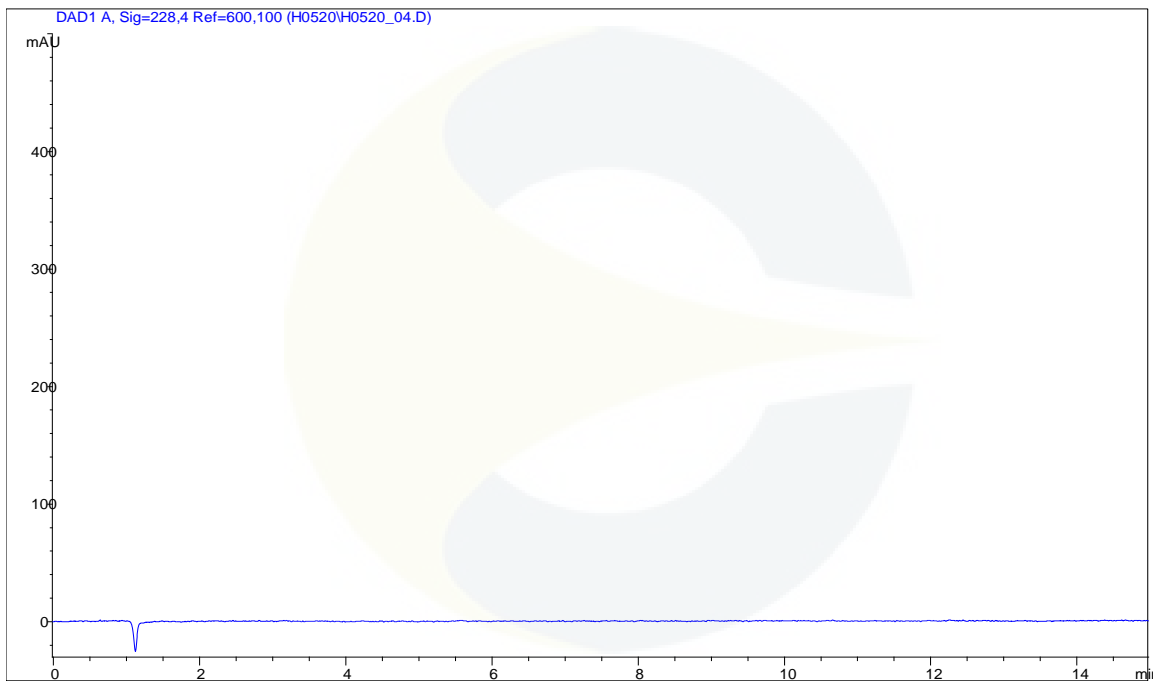
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UV SPECTRUM AT RT 1.5 MINUTES



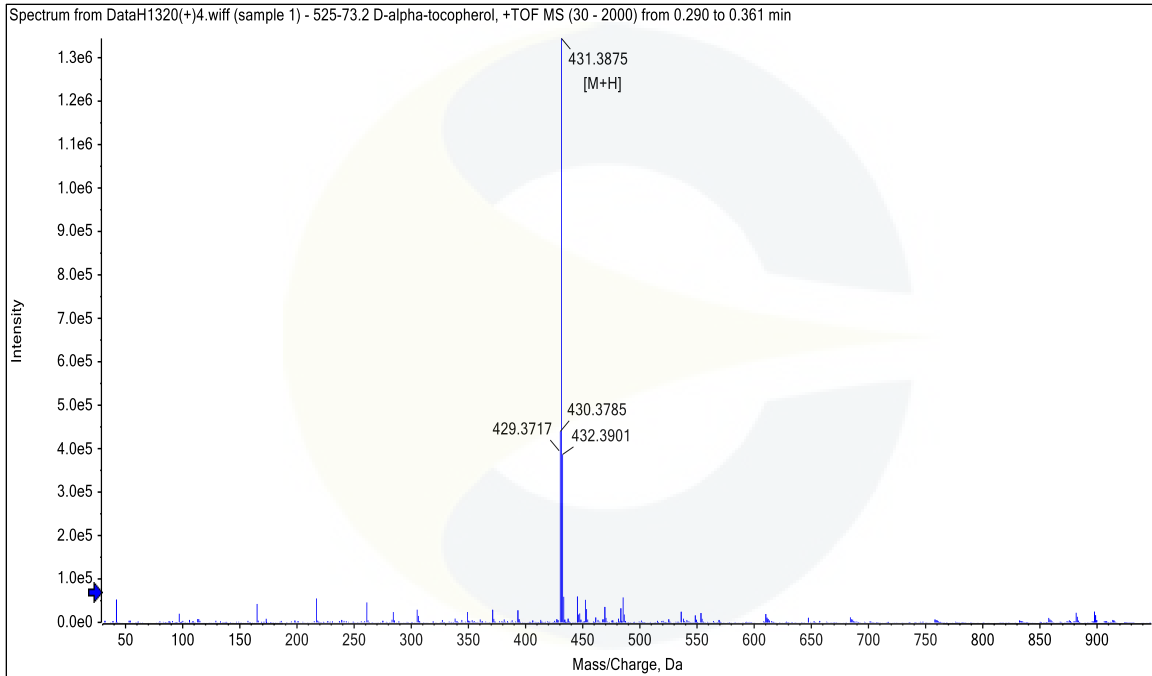
HPLC CHROMATOGRAM OF DILUENT BLANK



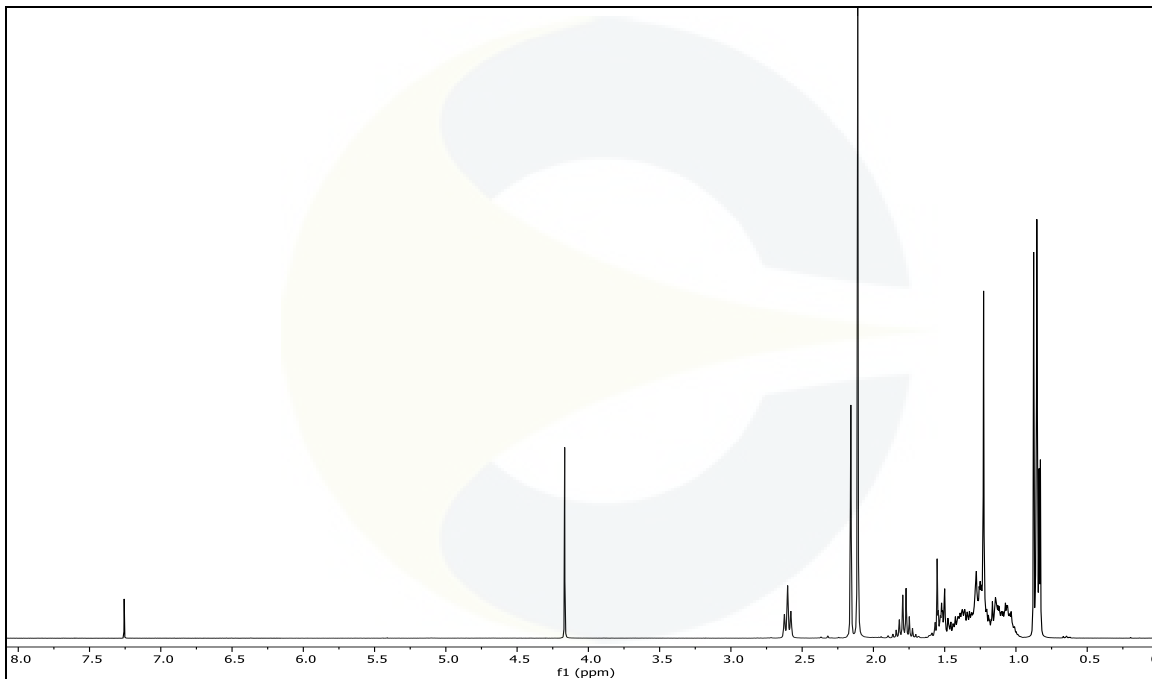
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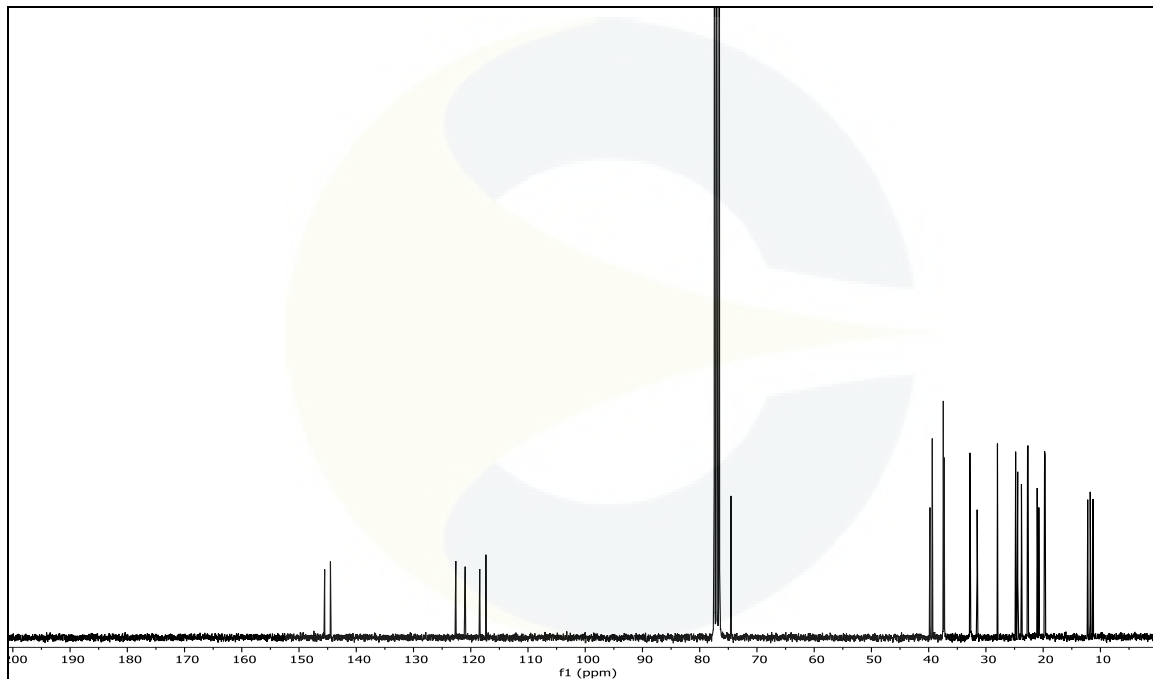
MASS SPECTRUM OF D-ALPHA-TOCOPHEROL (CDXP-20-00572)



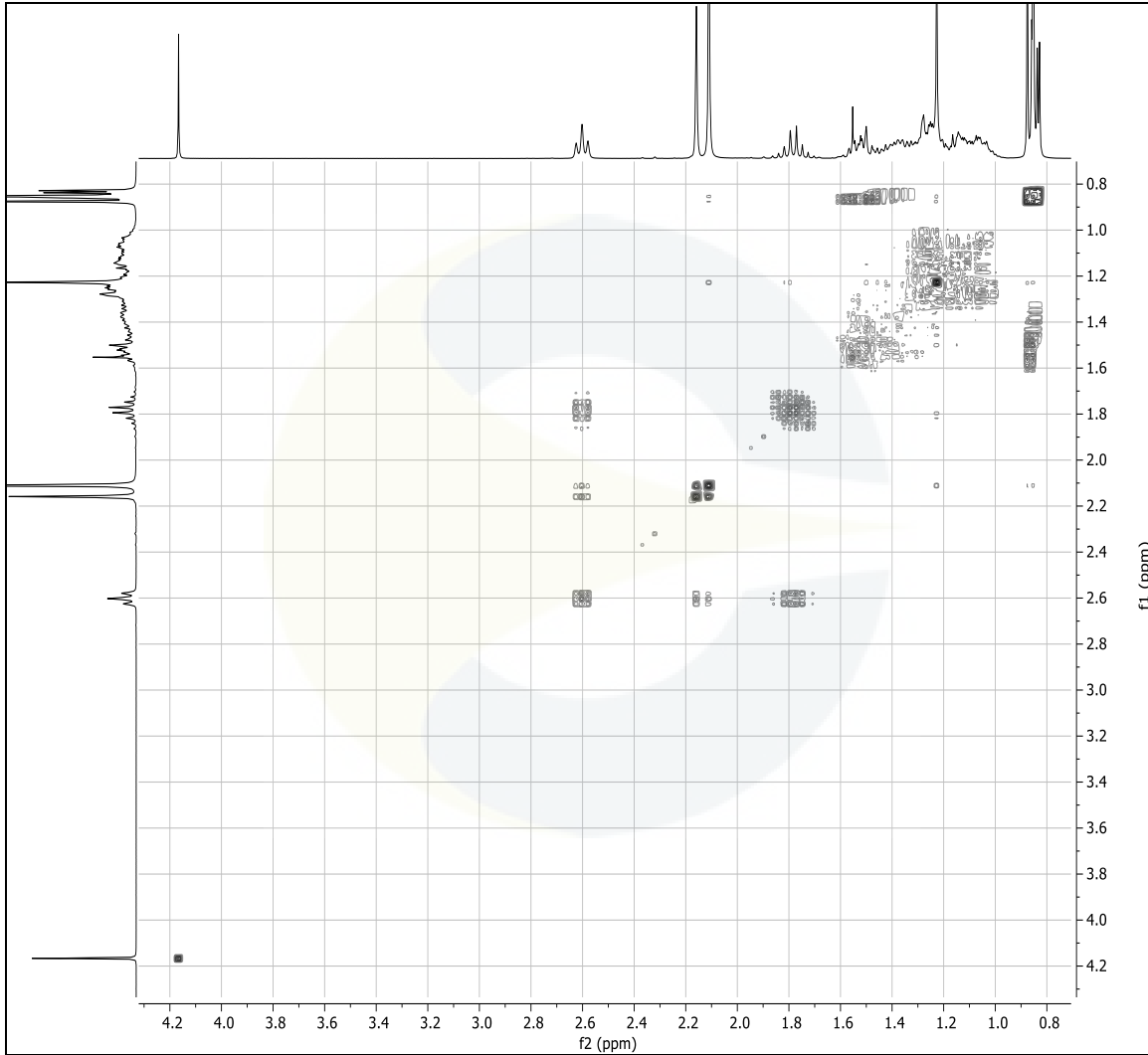
¹H-NMR SPECTRUM OF D-ALPHA-TOCOPHEROL (CDXP-20-00572) IN CDCl₃



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¹³C-NMR SPECTRUM D-ALPHA-TOCOPHEROL (CDXP-20-00572) IN CDCl₃

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COSY-NMR SPECTRUM OF D-ALPHA-TOCOPHEROL (CDXP-20-00572) IN CDCl₃

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	8/24/2020	New report

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