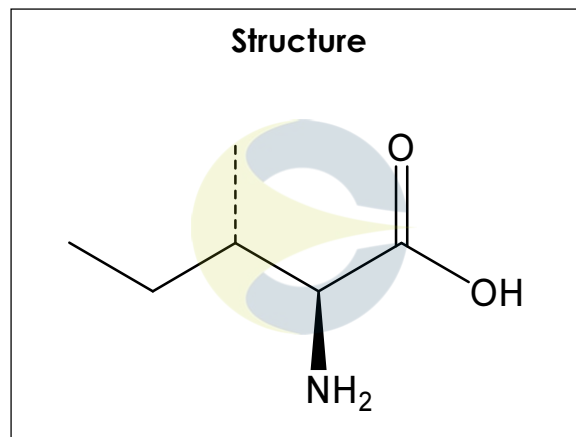


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PRODUCT NAME	L-Isoleucine
PART NUMBER	00009259
STANDARD TYPE	Primary (P)
LOT NUMBER	00009259-030
REPORT NUMBER	CDXA-RSS-7477-00
SAMPLE NUMBER	CDXA-17-002594
DATE OF SAMPLE	02/23/2017
DATE OF REPORT	03/28/2017



CHEMICAL NAMES	(2S,3S)-2-Amino-3-methylpentanoic acid; (2S,3S)- α -Amino- β -methylvaleric acid
CHEMICAL FORMULA	C ₆ H ₁₃ NO ₂
MOLECULAR WEIGHT (MW)	131.17
PUBLISHED MELTING POINT	NA
CHEMICAL FAMILY	Amino acids
CAS NUMBER	[73-32-5]
EC#(EINECS)	200-798-2
RTECS	NR4705000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	98.2 %
HPLC	CDXA-AM-101-00	NA	98.5 %
NMR	4.5.3-CD-4.0-000338	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-CDXA-2.0-000126	Conforms	Conforms
Residual Solvent	99.1-CD-10.0-000115	NA	MEK – 0.3 %
Water	99.1-CDXA-8.0-000094	NA	ND
Appearance	NA	NA	White Powder

ADJUSTED PURITY: 98.2% IS BASED ON (100 - 0.0 WATER - 0.3 SOLVENTS) X 98.5% HPLC

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	02/2022 under the above conditions.

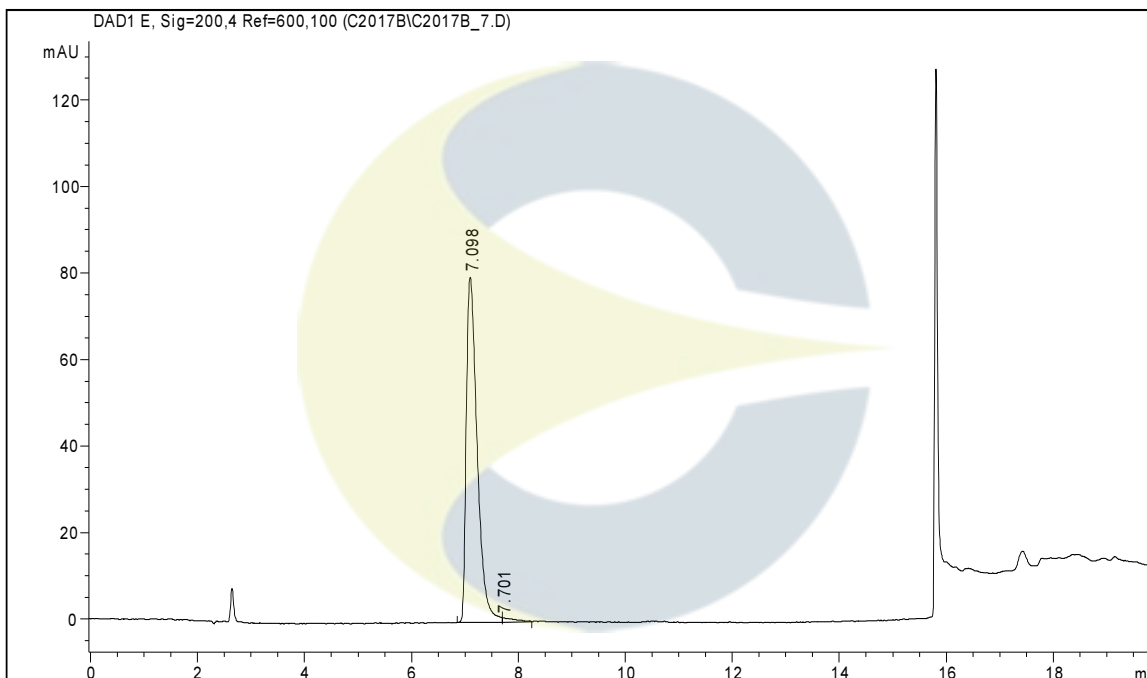
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1100 HPLC UV-VIS (DAD) DETECTOR FINNIGAN LCQ-DECA
COLUMN	Phenomenex Synergi Hydro-RP 80A 250 x 4.6 mm, 4 µm particle size
MOBILE PHASE	A: 10 mM KH ₂ PO ₄ pH 2.9 in Milli-Q water, B: Acetonitrile Isocratic 0% B for 10 minutes, then increase to 40% B over 5 minutes and hold for 4.9 minutes.
COLUMN TEMP.	22 °C
FLOW RATE	1.0 mL/minute
INJECTION VOL.	10.0 µL
INJECTION CONC.	1.8 mg/mL in Milli-Q water
DETECTION	200 ± 2 nm

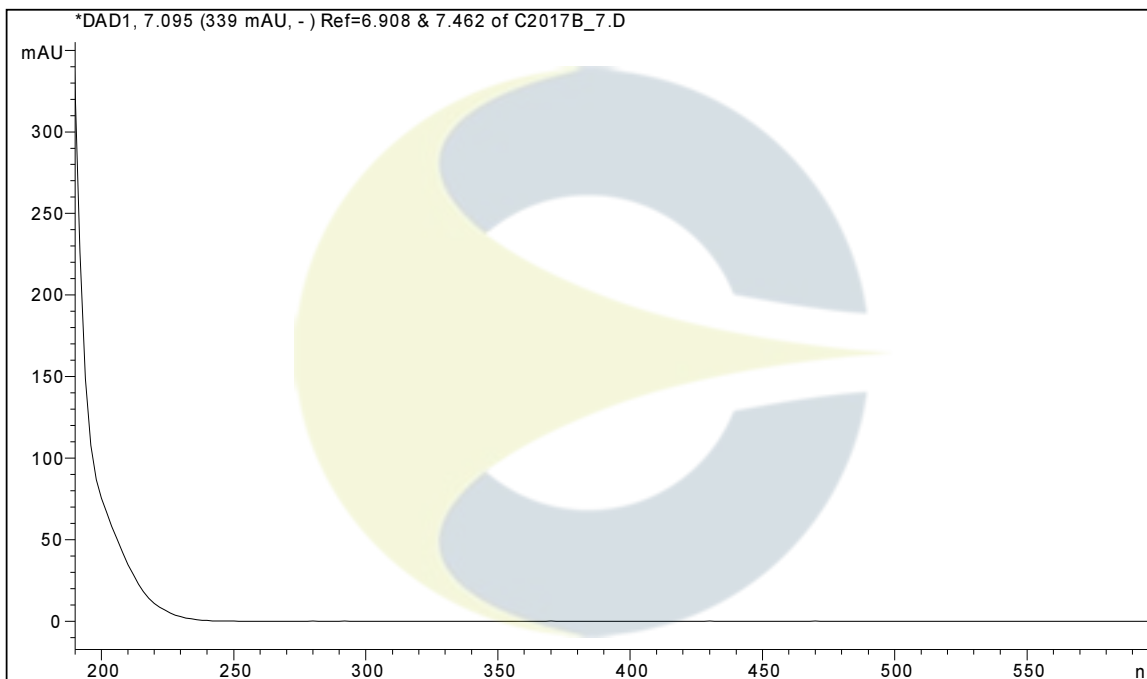
HPLC CHROMATOGRAM OF L-ISOLEUCINE (CDXA-17-002594)



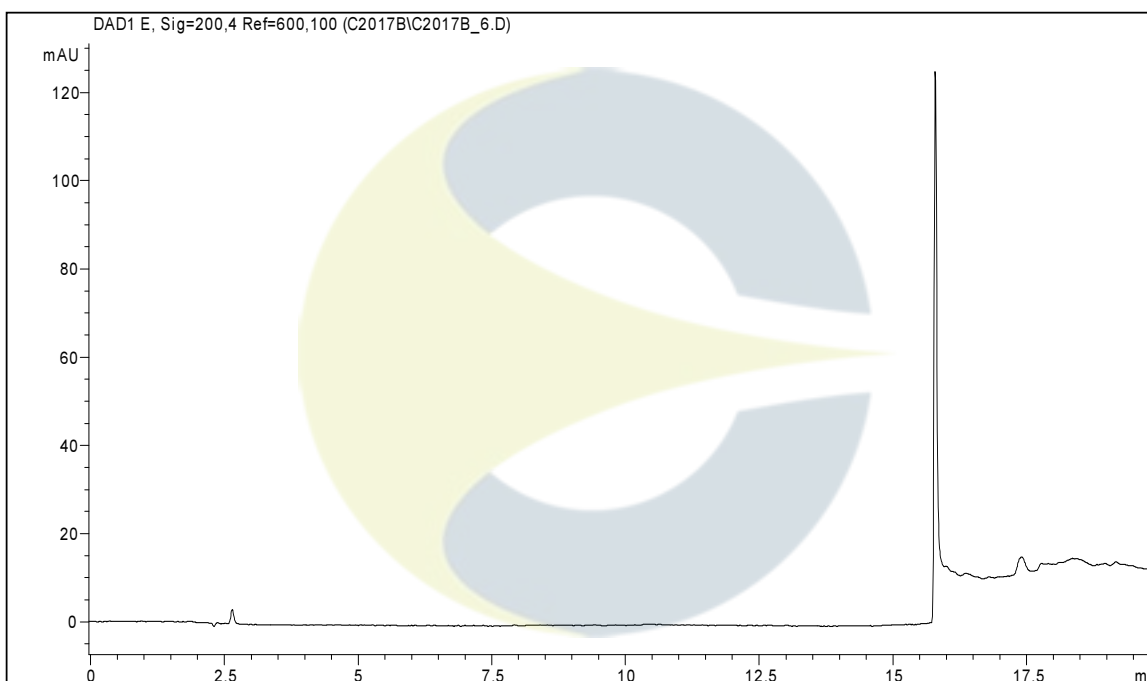
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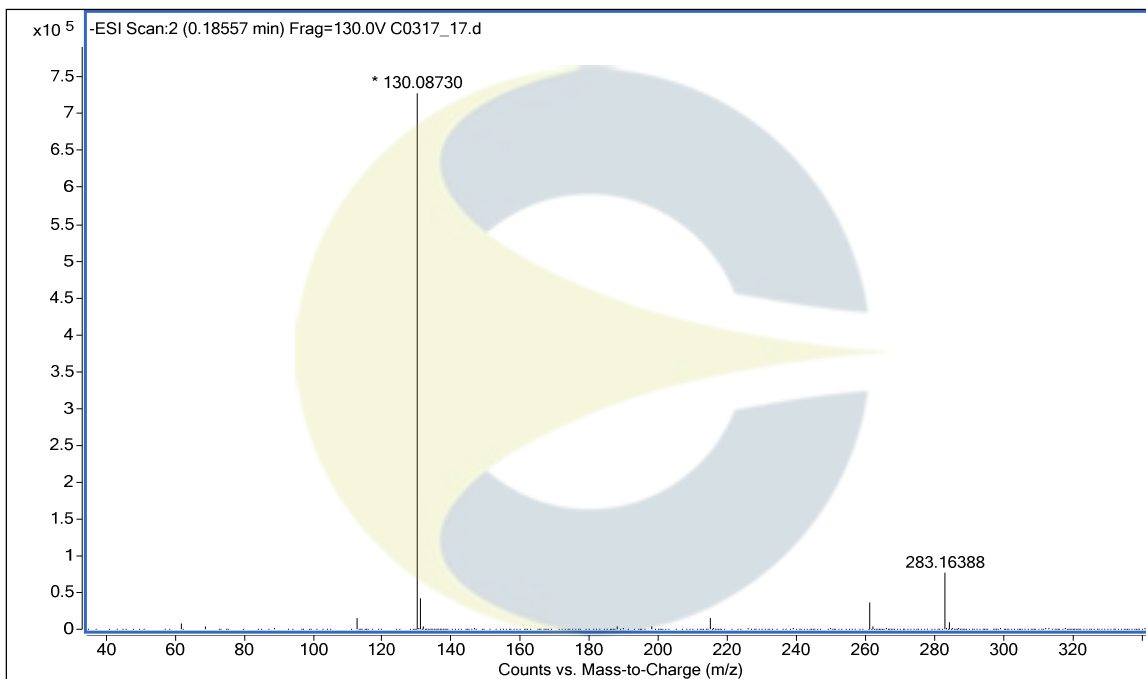
UV SPECTRUM AT RT = 7.1 MINUTES



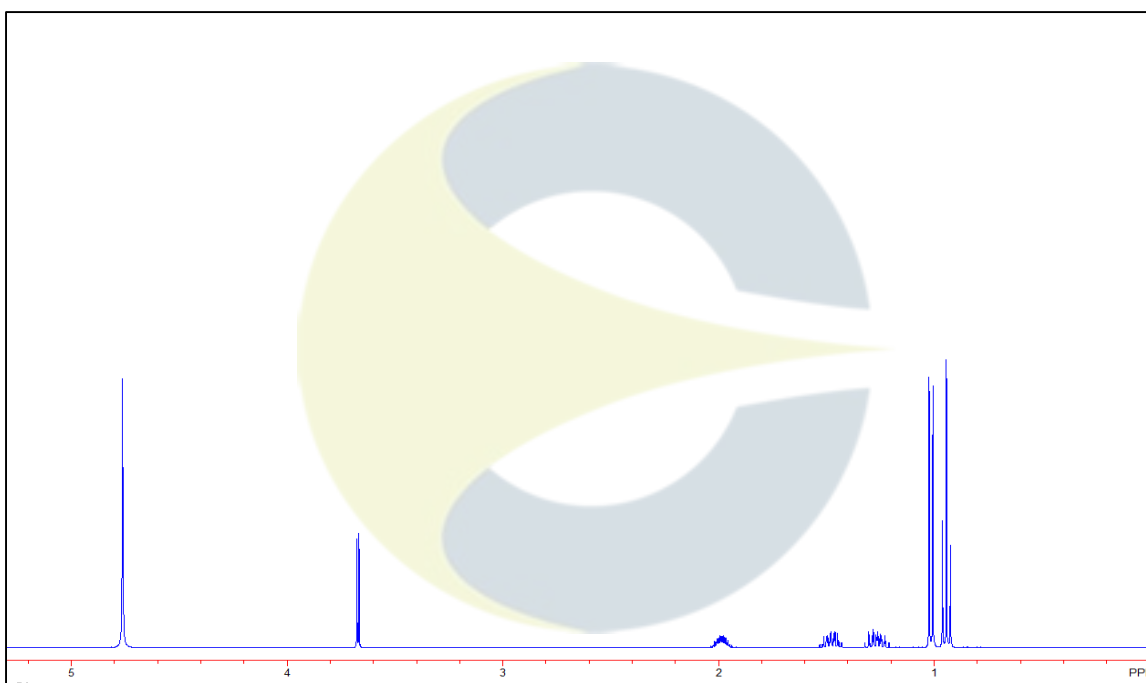
HPLC CHROMATOGRAM OF DILUENT BLANK



MASS SPECTRUM OF L-ISOLEUCINE (CDXA-17-002594)



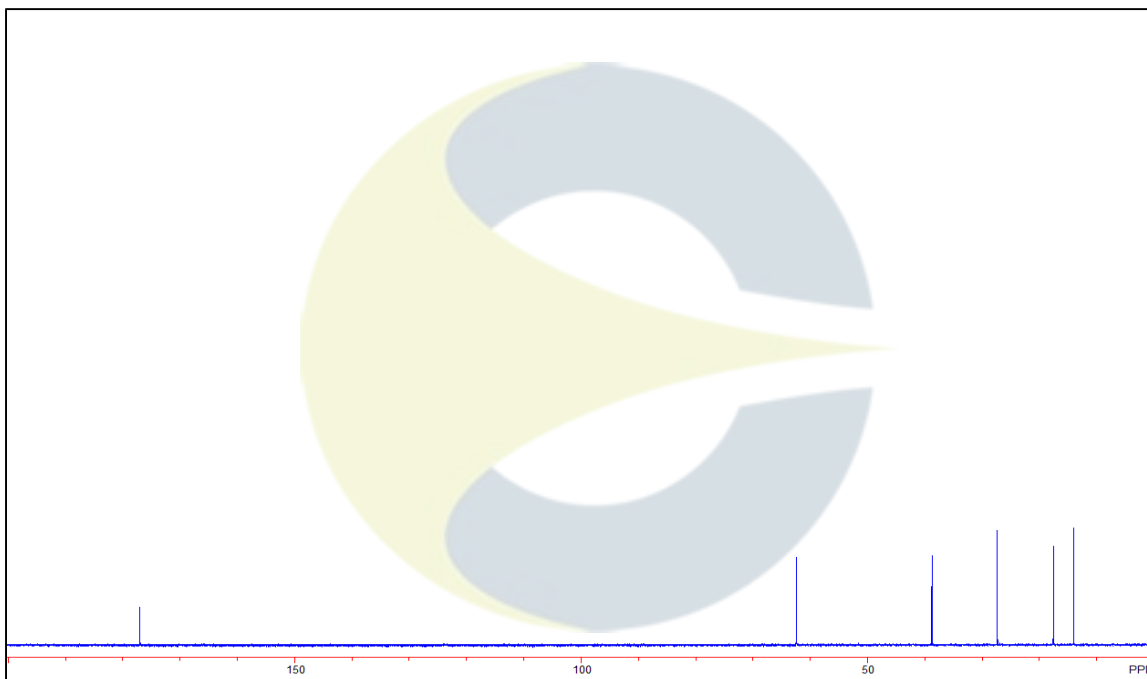
¹H-NMR SPECTRUM OF L-ISOLEUCINE (CDXA-17-002594) IN D₂O



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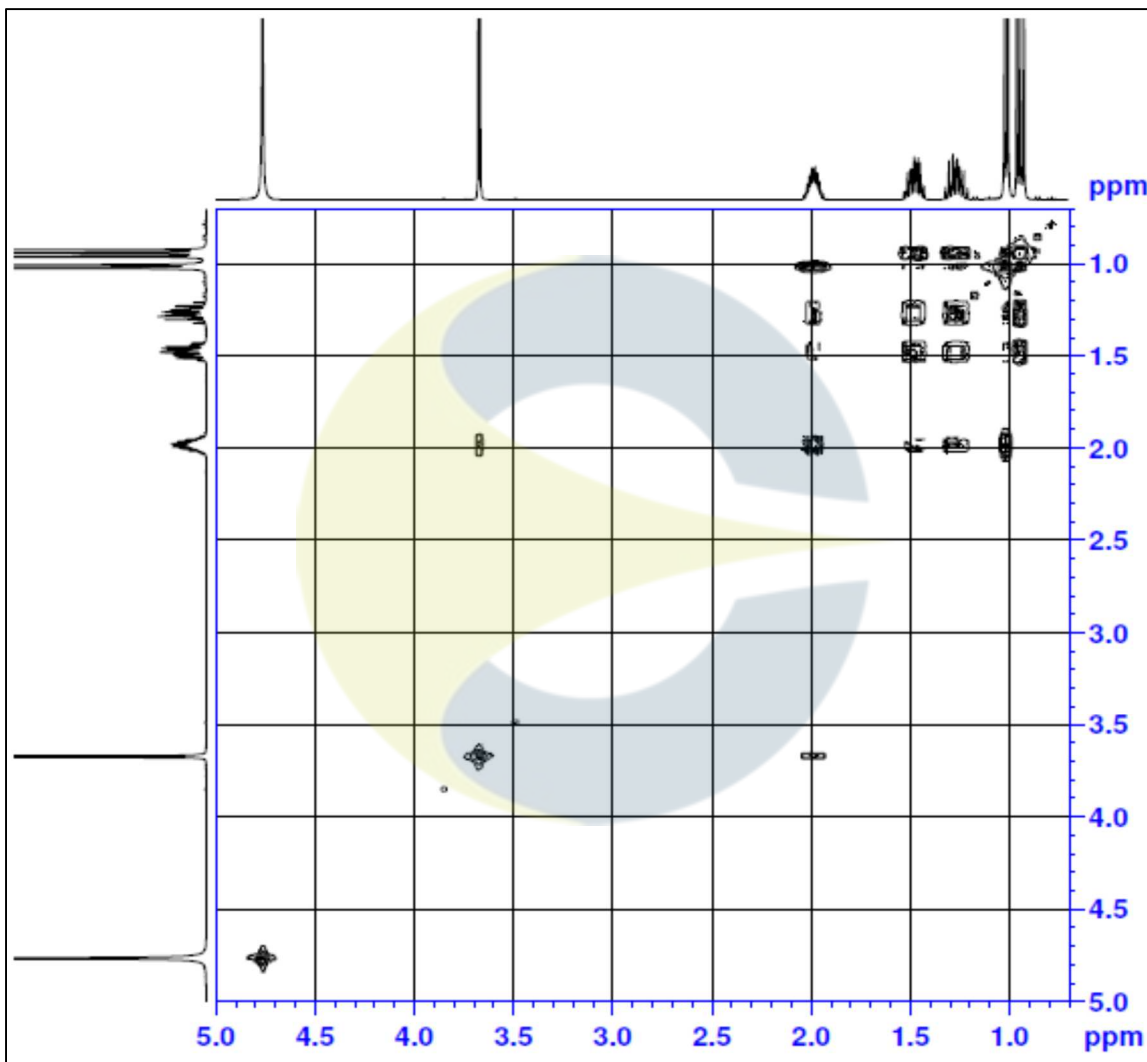
¹³C-NMR SPECTRUM OF L-ISOLEUCINE (CDXA-17-002594) IN D₂O



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COSY-NMR SPECTRUM OF L-ISOLEUCINE (CDXA-17-002594) IN D₂O



REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	03/28/2017	New report