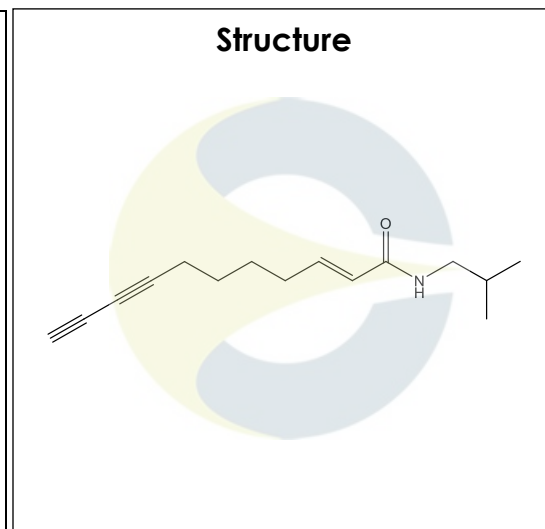


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PRODUCT NAME	Undec-2-ene-8,10-diynoic acid isobutylamide
PART NUMBER	00021235
STANDARD TYPE	Primary (P)
LOT NUMBER	00021235-1474
REPORT NUMBER	CDXA-RSS-4450-02
SAMPLE NUMBER	CDXA-11-1474
DATE OF SAMPLE	03/02/2011
DATE OF RE-EVALUATION	01/04/2016 (1 st); 12/09/2020 (2 nd)
DATE OF REPORT	01/07/2021



CHEMICAL NAMES	N-(2-methylpropyl)-2-Undecene-8,10-diynamide
CHEMICAL FORMULA	C ₁₅ H ₂₁ NO
MOLECULAR WEIGHT (MW)	231.33
CHEMICAL FAMILY	Alkaloids
CAS NUMBER	[99615-81-3]
EC#(EINECS)	NA
RTECS	NA

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.6%
HPLC	0.700.10.2.METH22	≥ 90%	99.6%
NMR	99.1-CD-1.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	Direct Infusion, ESI (+)	Conforms	Conforms
Residual Solvent*	99.1-CD-4.0-000115	NA	ND
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Off white powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 99.6% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 99.6% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	12/2025 under the above conditions.

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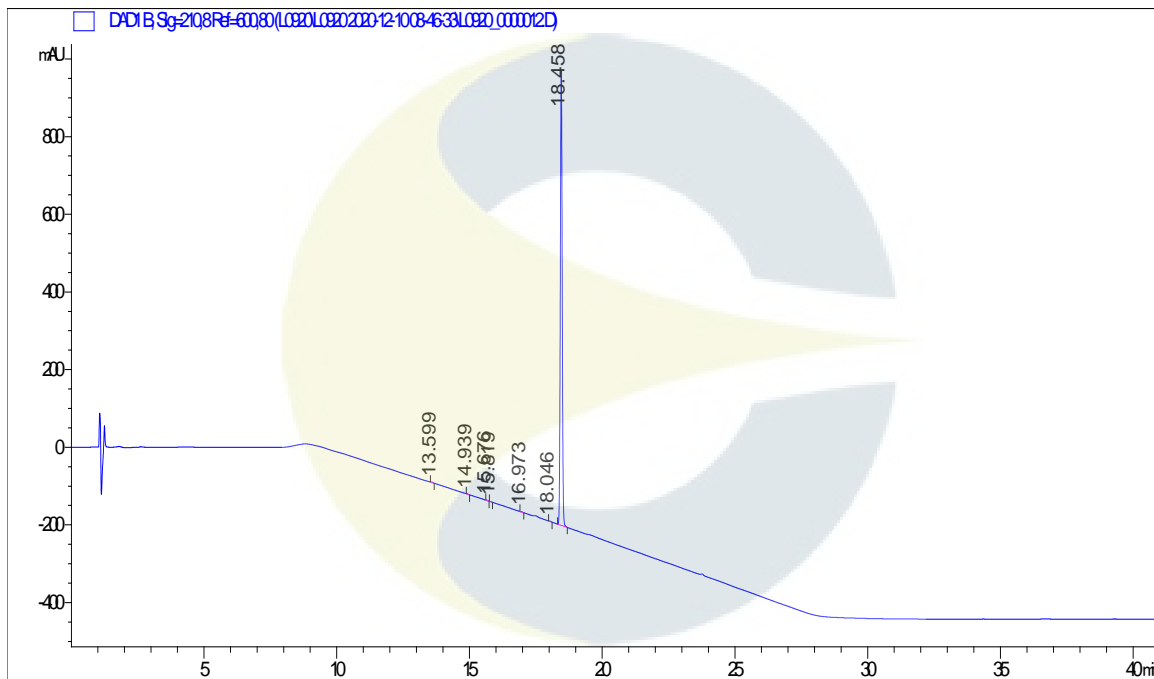
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 Q-TOF
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.	0.4 µL
INJECTION CONC.	1.2 mg/mL in Methanol
DETECTION	210 ± 4 nm

HPLC CHROMATOGRAM OF UNDEC-2-ENE-8,10-DIYNOIC ACID ISOBUTYLAMIDE (CDXA-11-1474)

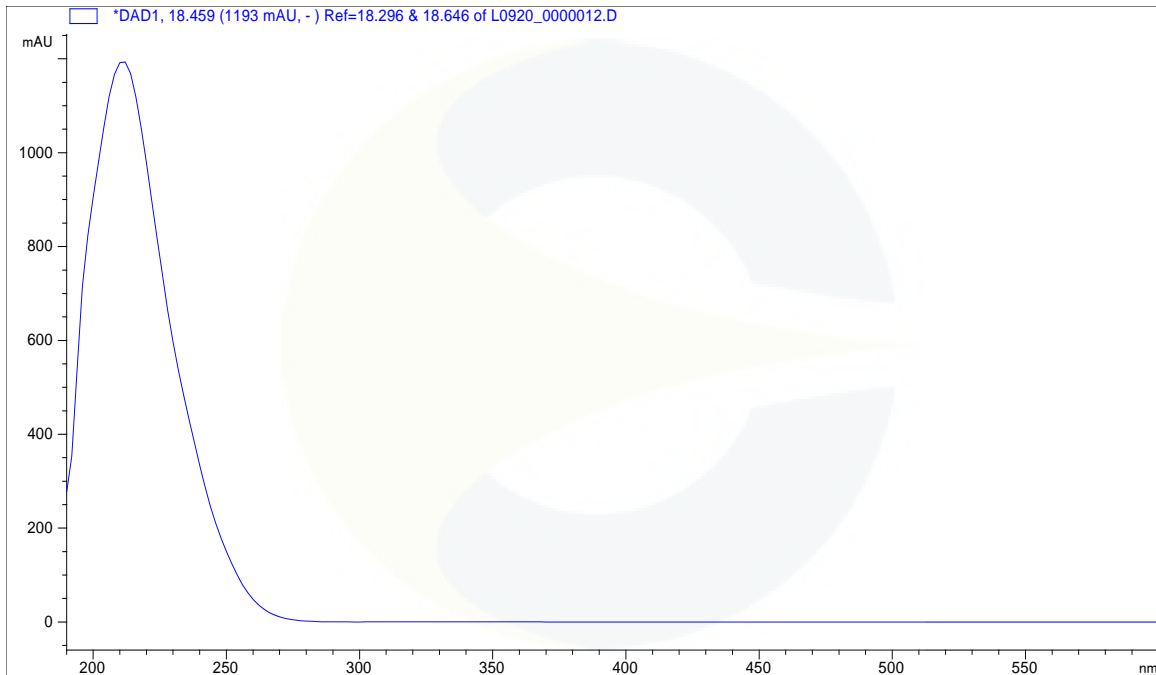


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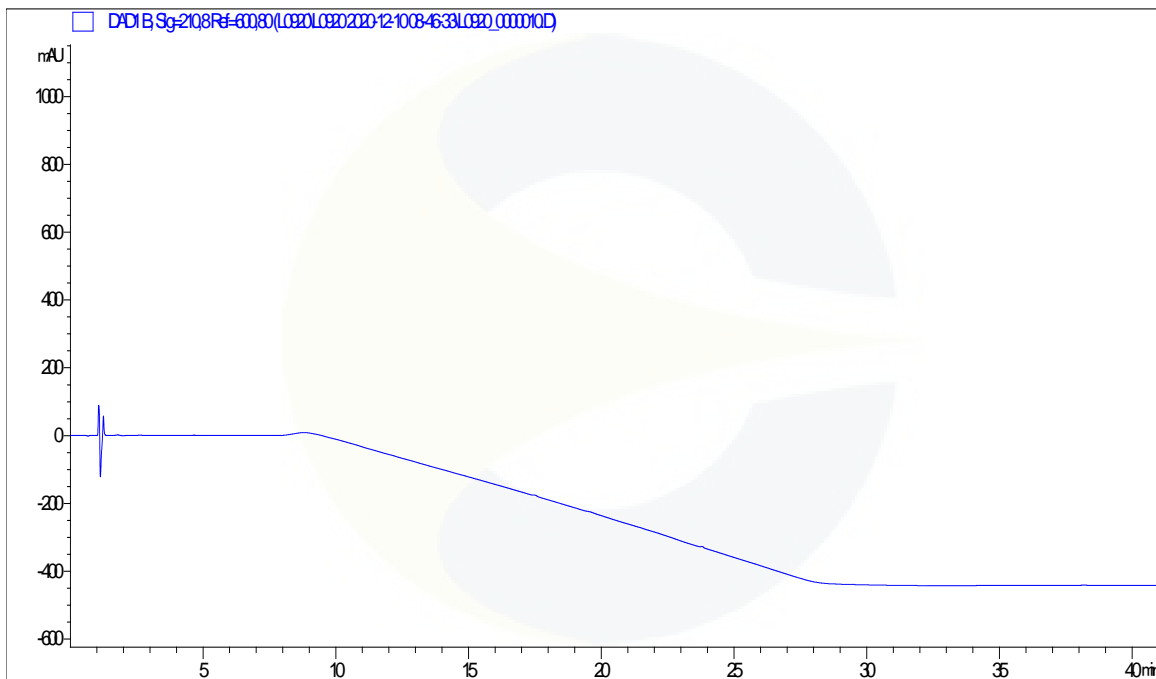
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UV SPECTRUM AT RT = 18.5 MINUTES

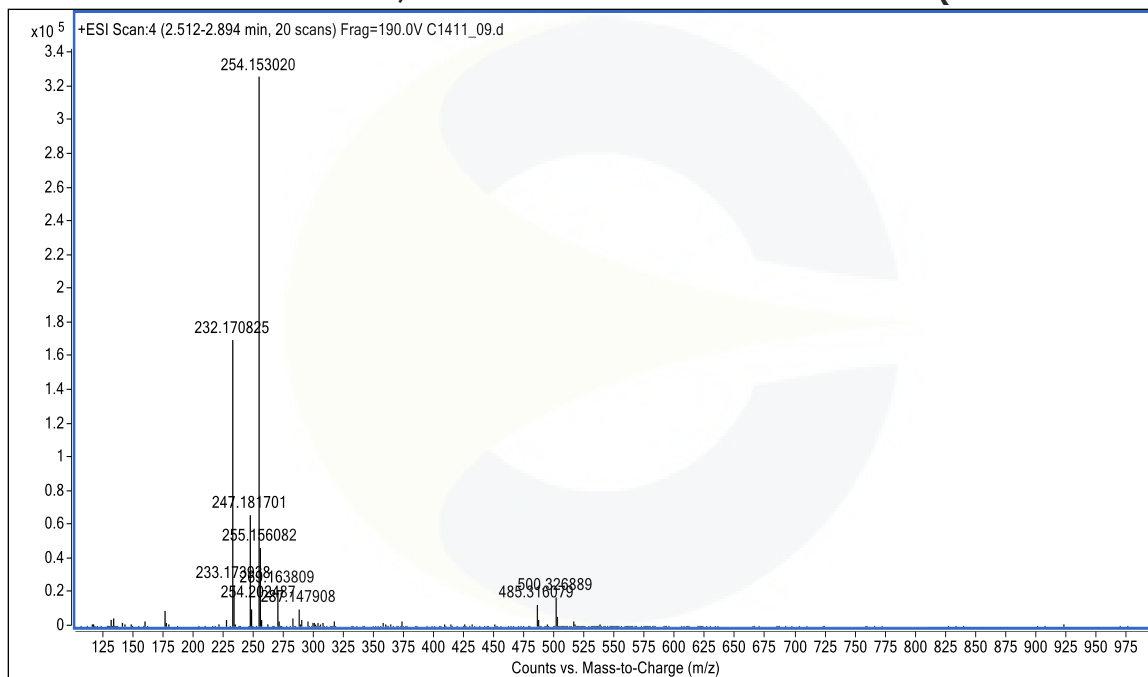


HPLC CHROMATOGRAM OF DILUENT BLANK

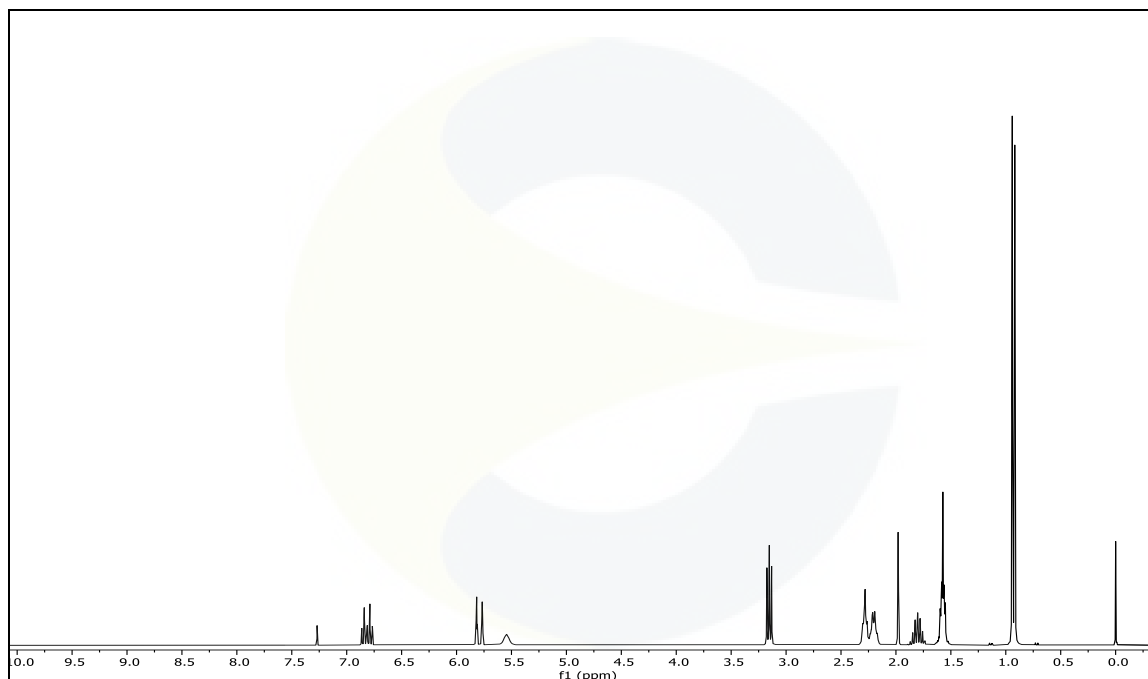


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MASS SPECTRUM OF UNDEC-2-ENE-8,10-DIYNOIC ACID ISOBUTYLAMIDE (CDXA-11-1474)



¹H-NMR SPECTRUM OF UNDEC-2-ENE-8,10-DIYNOIC ACID ISOBUTYLAMIDE (CDXA-11-1474) IN CDCl₃ + TMS



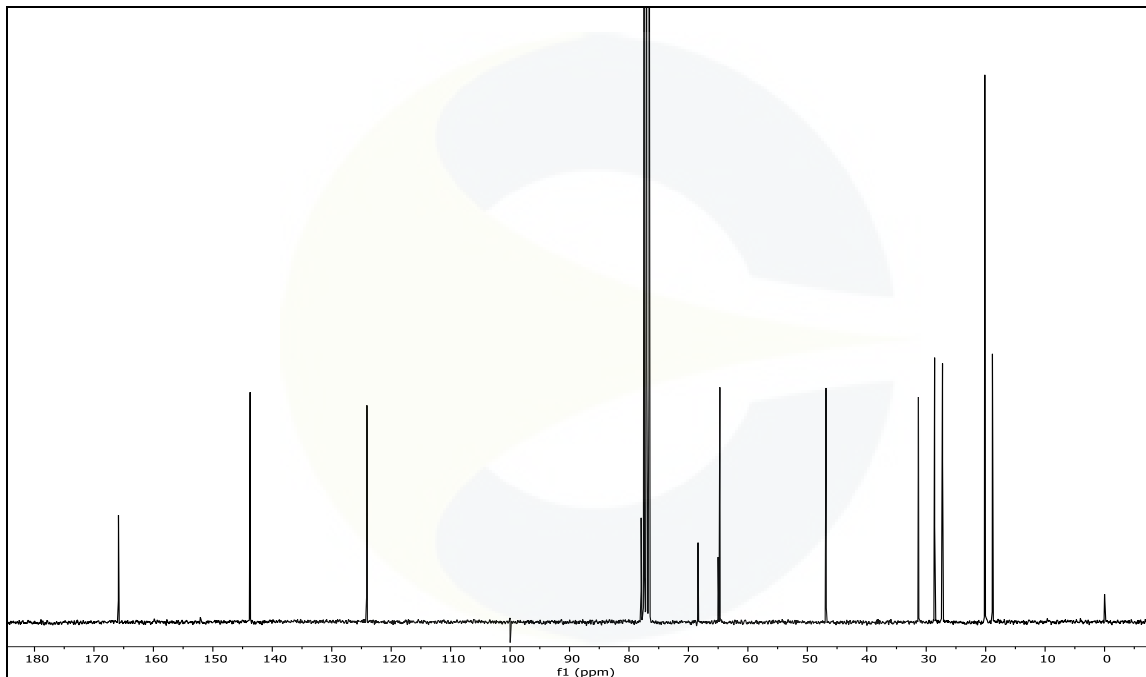
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10900 Wilshire Blvd., Suite 600, Los Angeles, CA 90024 | T: +1 949-419-0288 | F: +1 949-419-0294 | www.chromadex.com
Laboratory address: 1751 S. Fordham St., Suite 350, Longmont, CO 80503

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

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¹³C-NMR SPECTRUM OF UNDEC-2-ENE-8,10-DIYNOIC ACID ISOBUTYLAMIDE (CDXA-11-1474) IN CDCl₃ + TMS

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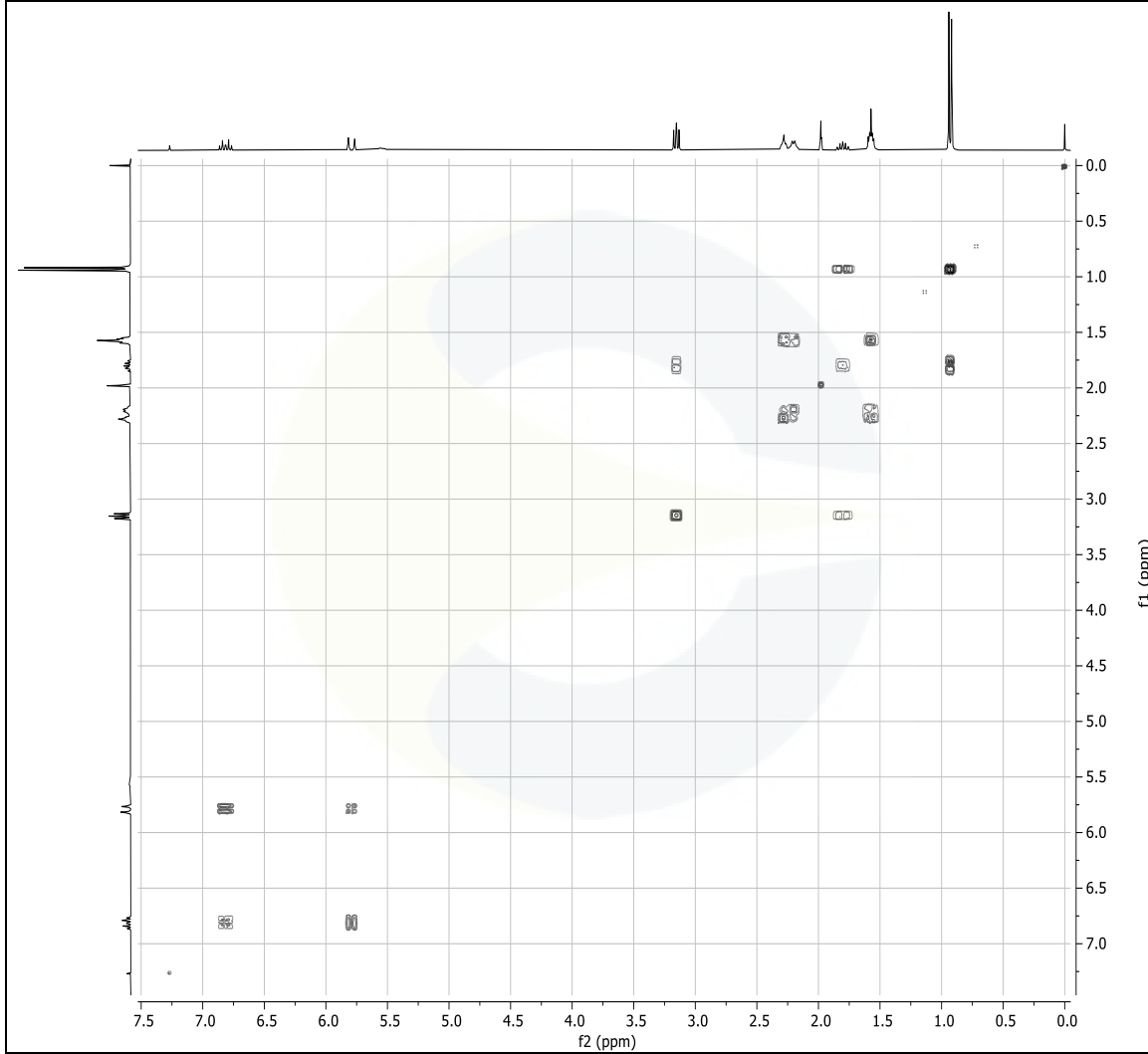
10900 Wilshire Blvd., Suite 600, Los Angeles, CA 90024 | T: +1 949-419-0288 | F: +1 949-419-0294 | www.chromadex.com
Laboratory address: 1751 S. Fordham St., Suite 350, Longmont, CO 80503

India Contact:

Life Technologies (India) Pvt. Ltd.

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Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

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COSY-NMR SPECTRUM OF UNDEC-2-ENE-8,10-DIYNOIC ACID ISOBUTYLAMIDE (CDXA-11-1474) IN CDCL3 + TMS

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	05/27/2011	New report
01	02/03/2016	Passed re-evaluation by HPLC, KF. Updated expiration date and melting point.
02	01/07/2021	Passed second re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, chromatograms, NMR data, appearance, and results. Removed melting point.

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