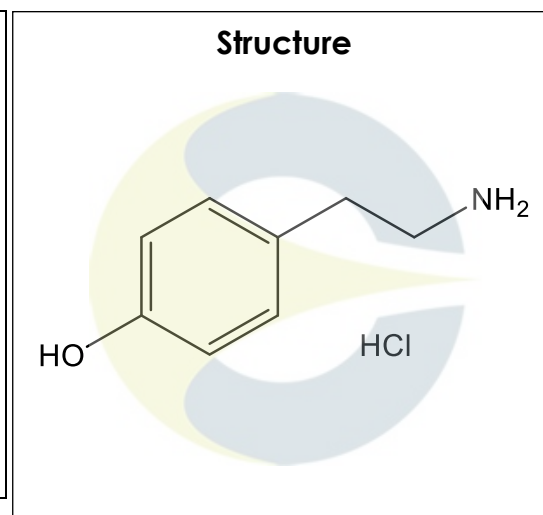


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PRODUCT NAME	Tyramine HCl
PART NUMBER	00020601
STANDARD TYPE	Primary (P)
LOT NUMBER	00020601-1307
REPORT NUMBER	CDXA-RSS-5440-02
SAMPLE NUMBER	CDXA-13-1307
DATE OF SAMPLE	02/20/2013
DATE OF RE-EVALUATION	06/27/2017 (1 st); 09/30/2021 (2 nd)
DATE OF REPORT	10/14/2021



CHEMICAL NAMES	4-(2-Aminoethyl)-phenol hydrochloride (1:1); 4-Hydroxyphenethylamine hydrochloride
CHEMICAL FORMULA	C ₈ H ₁₁ NO · HCl
MOLECULAR WEIGHT (MW)	173.64
CHEMICAL FAMILY	Alkaloids
CAS NUMBER	[60-19-5]
EC#(EINECS)	200-462-5
RTECS	SJ6050000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.4%
HPLC	CPM-096-00	≥ 90%	99.4%
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-6.0-000115	NA	ND
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

ADJUSTED PURITY: 99.4% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 99.4% HPLC

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	09/2026 under the above conditions.

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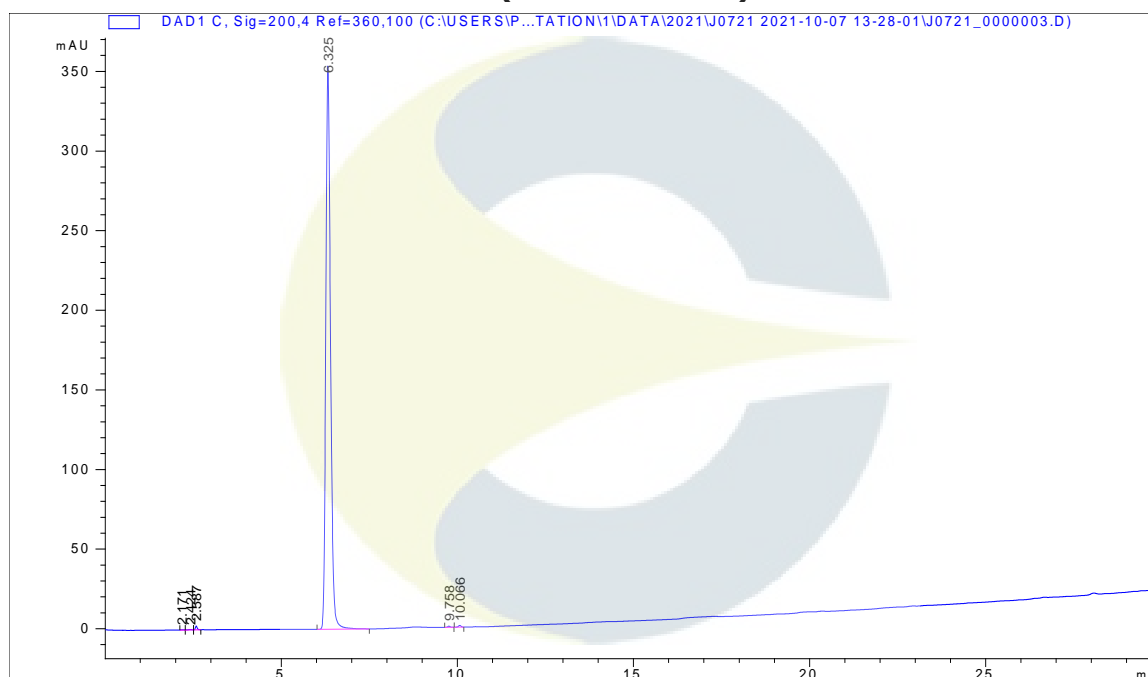
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF
COLUMN	Phenomenex Luna C18(2) 250 x 4.6 mm, 5 μm particle size
MOBILE PHASE	A - Acetonitrile, B – 10 mM Potassium phosphate in Milli-Q Water, pH 2.9; Isocratic 5% B for 3 minutes, then increasing to 65% B over 25 minutes. Hold at 65% B for 2 minutes.
COLUMN TEMP.	22 °C
FLOW RATE	1.0 mL/minute
INJECTION VOL.	0.5 μL
INJECTION CONC.	1.3 mg/mL in Milli-Q Water
DETECTION	200 ± 4 nm

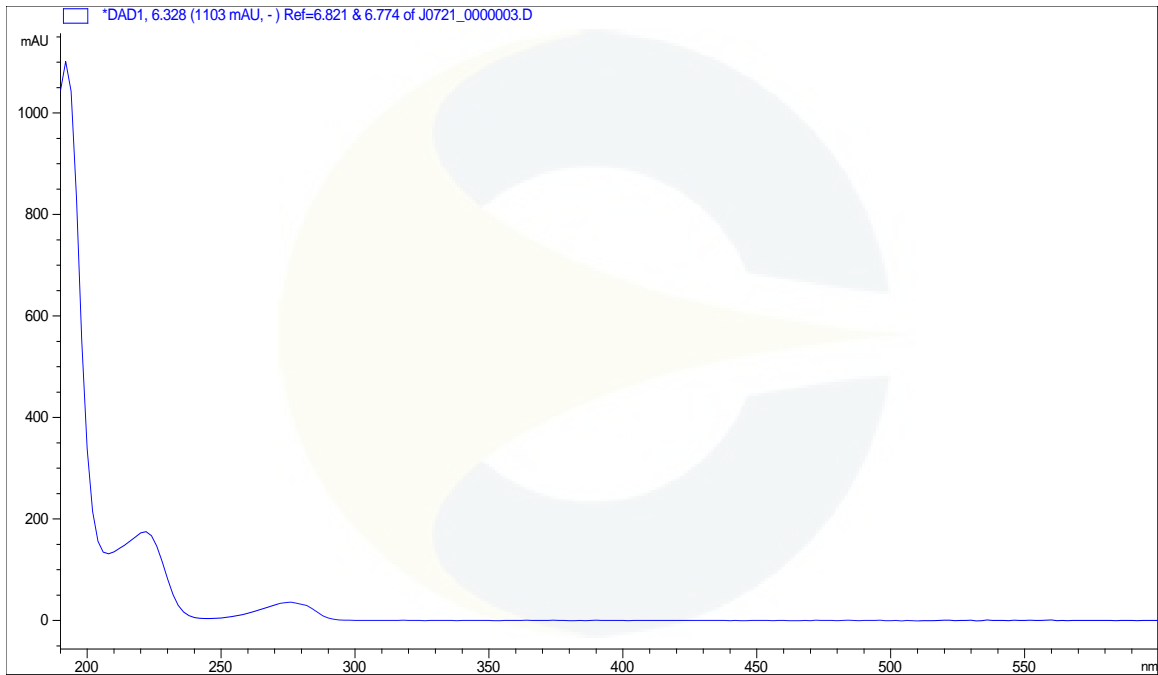
HPLC CHROMATOGRAM OF TYRAMINE HCl (CDXA-13-1307)



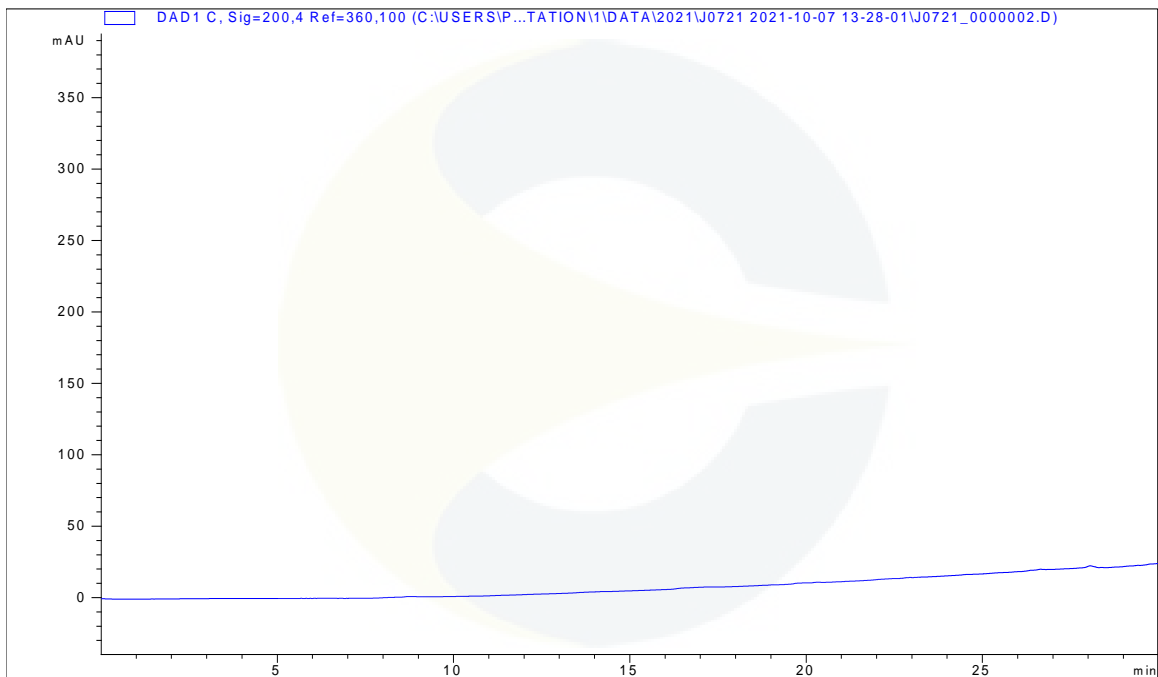
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UV SPECTRUM AT RT = 6.3 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK



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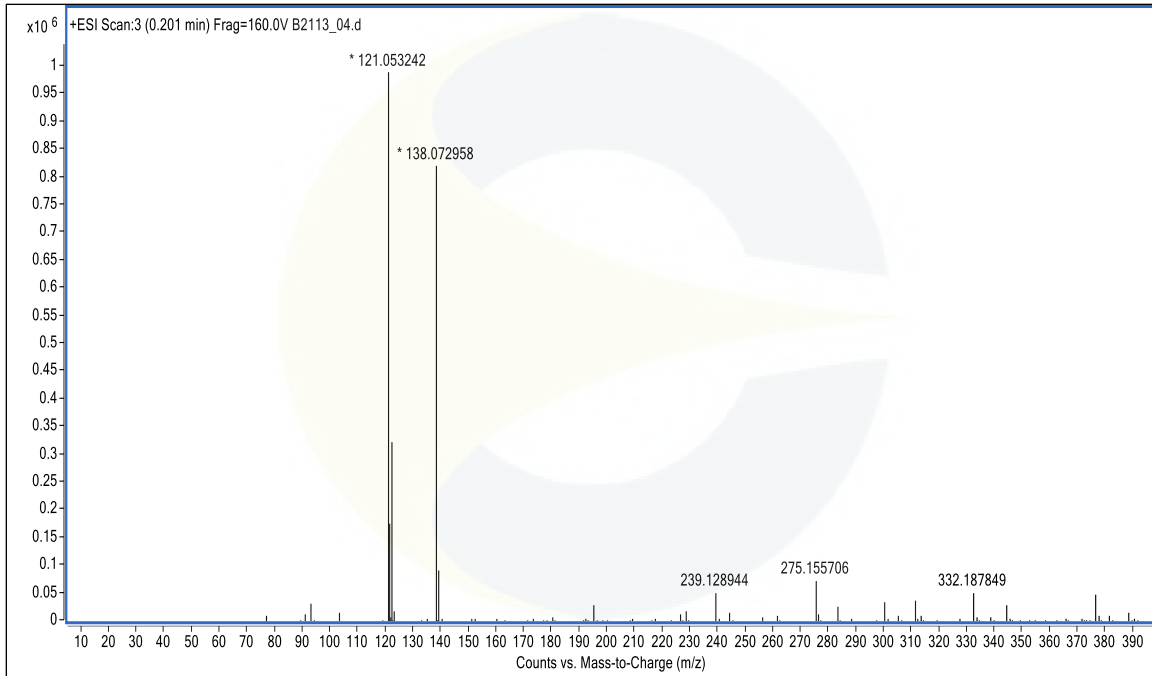
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India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com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

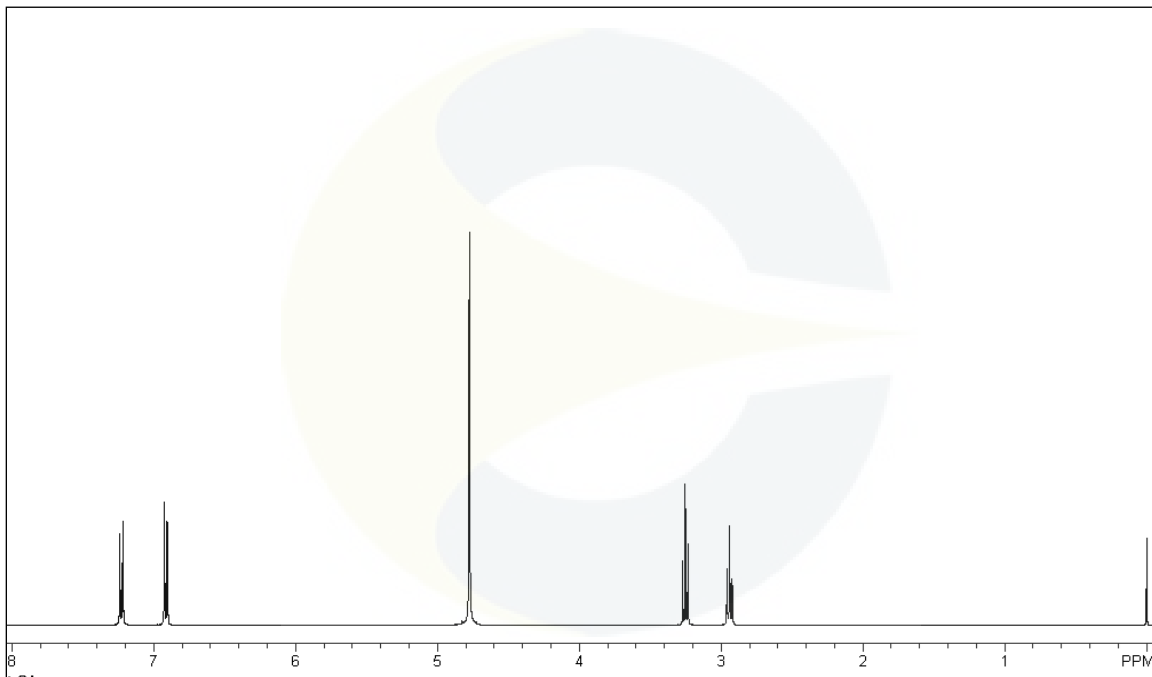
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MASS SPECTRUM OF TYRAMINE HCl (CDXA-13-1307)



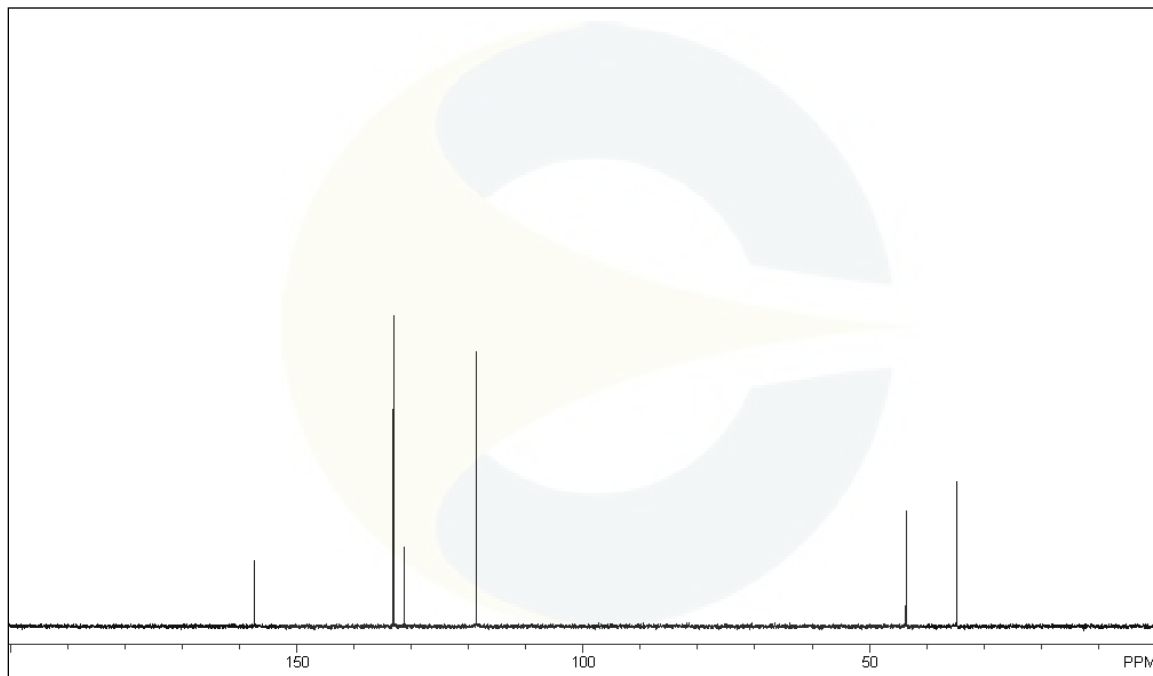
¹H-NMR SPECTRUM OF TYRAMINE HCl (CDXA-13-1307) IN D₂O



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¹³C-NMR SPECTRUM OF TYRAMINE HCl (CDXA-13-1307) IN D₂O

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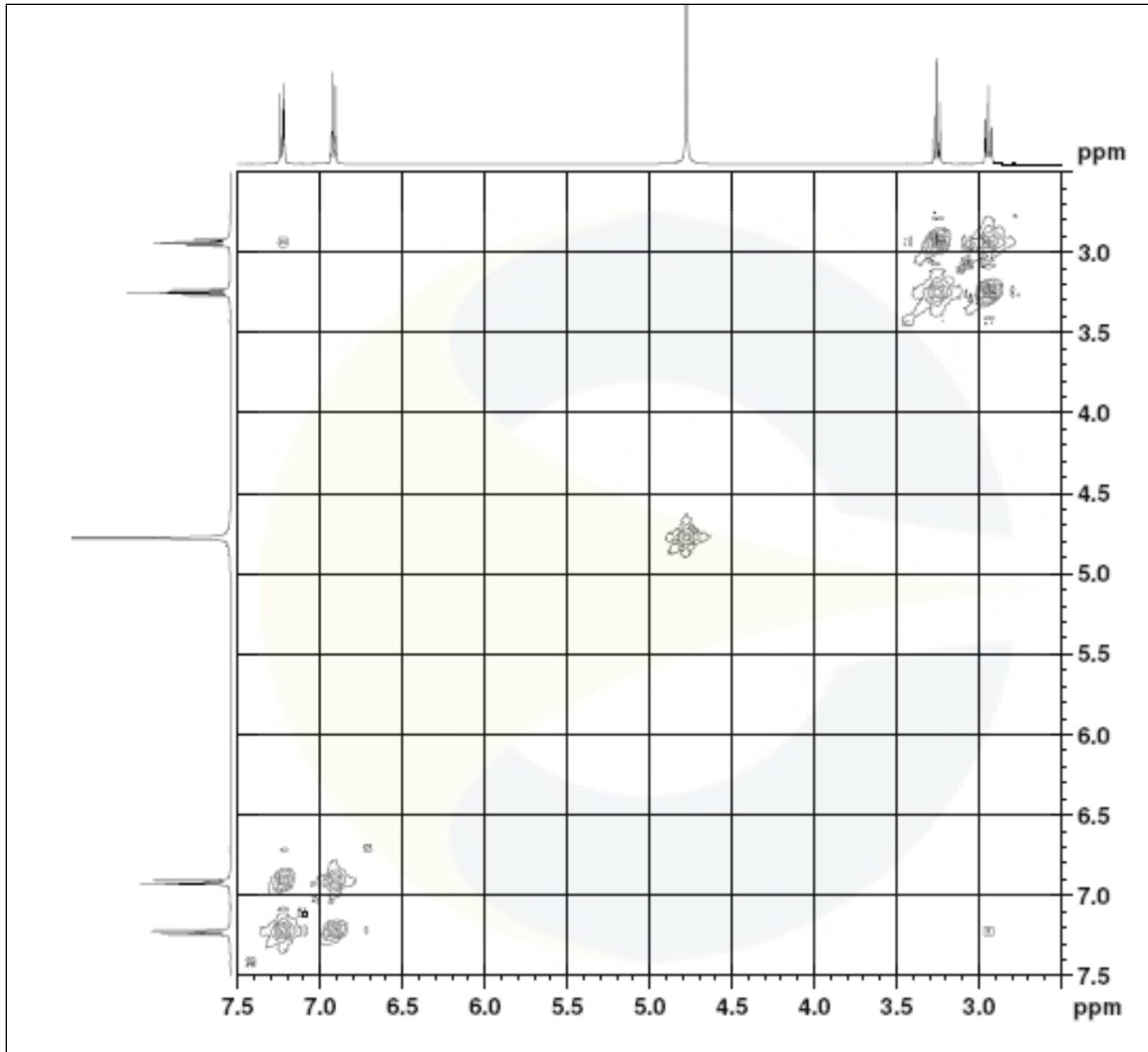
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Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

COSY-NMR SPECTRUM OF TYRAMINE HCl (CDXA-13-1307) IN D₂O

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	03/06/2013	New report
01	08/02/2017	Passed re-evaluation by HPLC, KF. Updated expiration date analytical method, conditions, chromatograms and results. Removed melting point.
02	10/14/2021	Passed re-evaluation by HPLC and KF. Updated expiration date, analytical method, conditions, chromatograms, and results.

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