LoGiCal®
produced by LGC

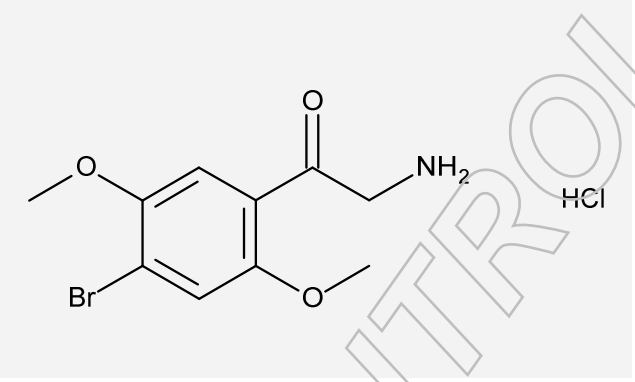
Certificate of Analysis

Reference Substance

bk-2C-B HCl (2-Amino-1-(4-bromo-2,5-dimethoxyphenyl)ethanone Hydrochloride)

Catalogue Number:	LGCFOR1387.15
Lot Number:	50913
Molecular Formula:	$C_{10}H_{12}BrNO_3$ HCl
Molecular Weight:	310.57
CAS Number:	[unlisted]

Long-term Storage:	2 to 8 °C, dark
Appearance:	white solid
Melting Point:	224 °C (dec.)
Assay 'as is':	98.9 %



Date of shipment: **2017-September-05**

This certificate is valid for two years from the date of shipment provided the substance is stored under the recommended conditions unopened in the original container.

Release Date: 2014-04-16

LGC GmbH

Dr. Sabine Schröder
Product Release

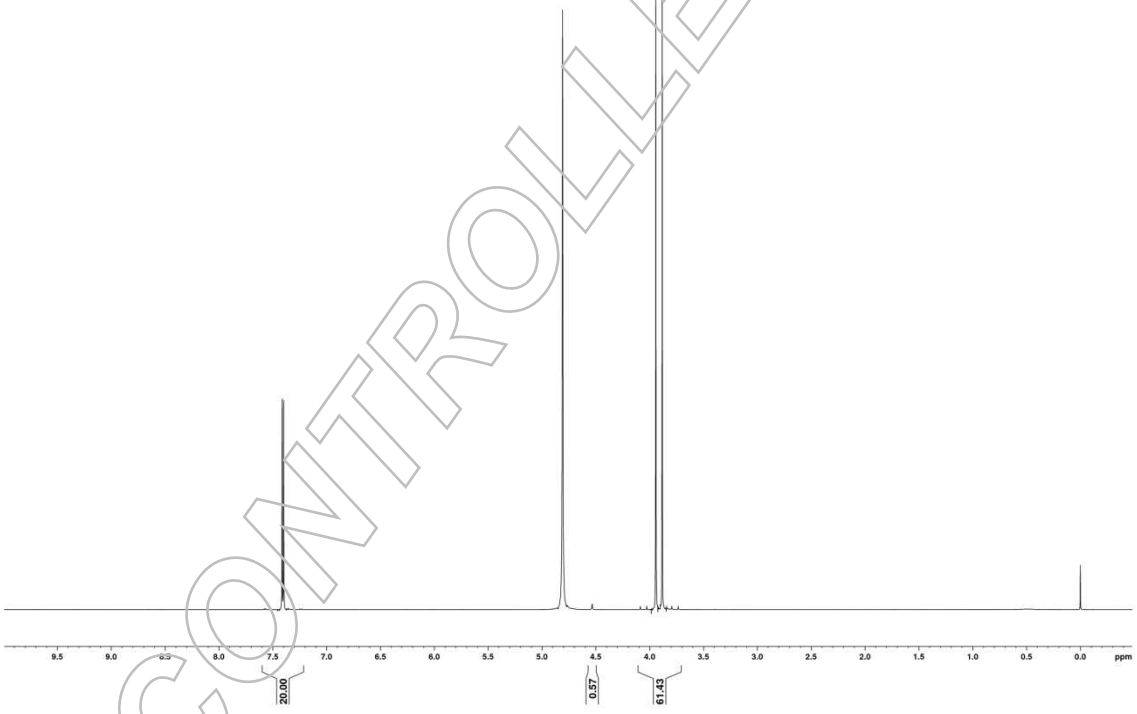
I. Identity

The identity of the reference substance was established by following analyses.

Ia. ^{1}H-NMR Spectrum

Conditions: 400 MHz, D_2O

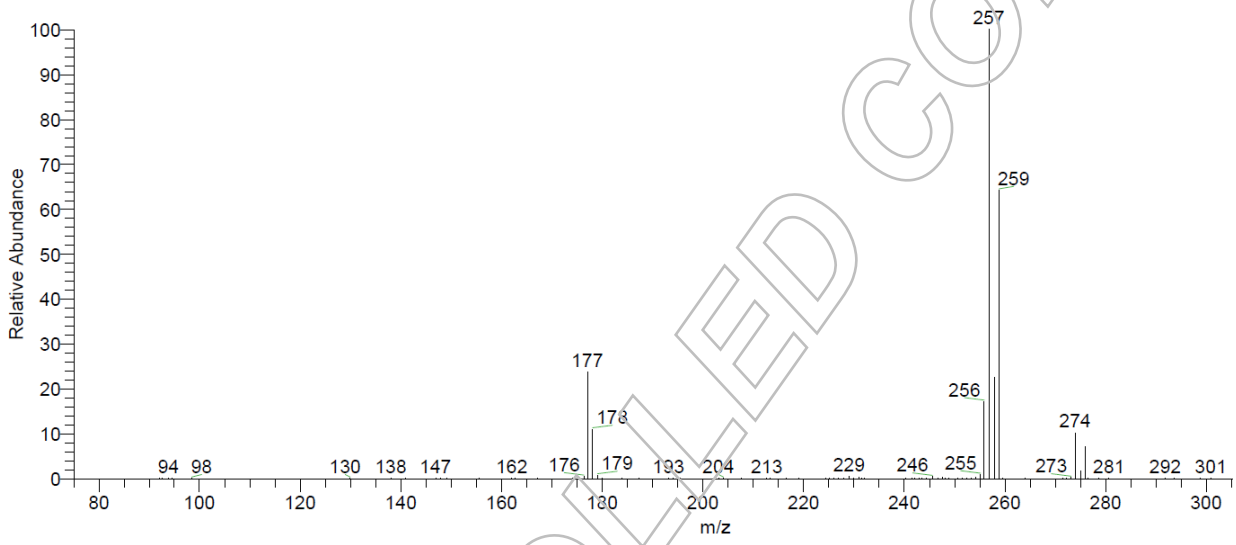
The structure is confirmed with the signals of the spectrum and their interpretation.



LGC Standards
Excellence through measurement

Ib. Mass Spectrum

Method: 4.5 kV ESI; vaporization temperature: 200 °C, direct inlet



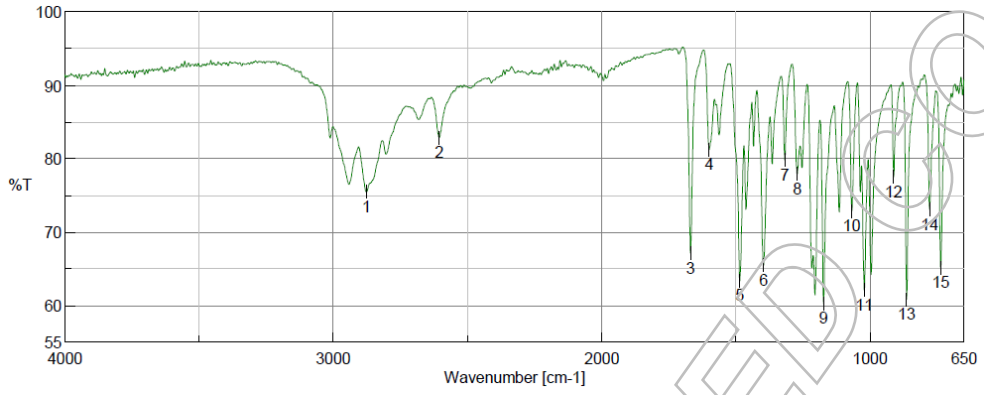
m/z	fragments (M = free base)
274	[MH]
259	[MH – CH_3]
257	[MH – NH_3]

The signals of the mass spectrum and their interpretation are consistent with the structural formula.

LGC Standards
Excellence through measurement

Ic. IR Spectrum

Method: Attenuated Total Reflection Fourier Transform Infrared (ATR-FTIR) Spectroscopy



Results of Peak Find

No.	Position	Intensity
1	2877.27	75.448
2	2605.36	82.828
3	1669.09	67.0696
4	1599.66	81.2309
5	1485.88	63.3448
6	1397.17	65.4951
7	1318.11	79.8186
8	1271.82	77.8994
9	1173.47	60.2446
10	1068.37	72.8155
11	1022.09	62.0426
12	912.165	77.4515
13	863.953	60.7927
14	778.136	72.999
15	736.674	65.1218

The signals of the IR spectrum and their interpretation are consistent with the structural formula.

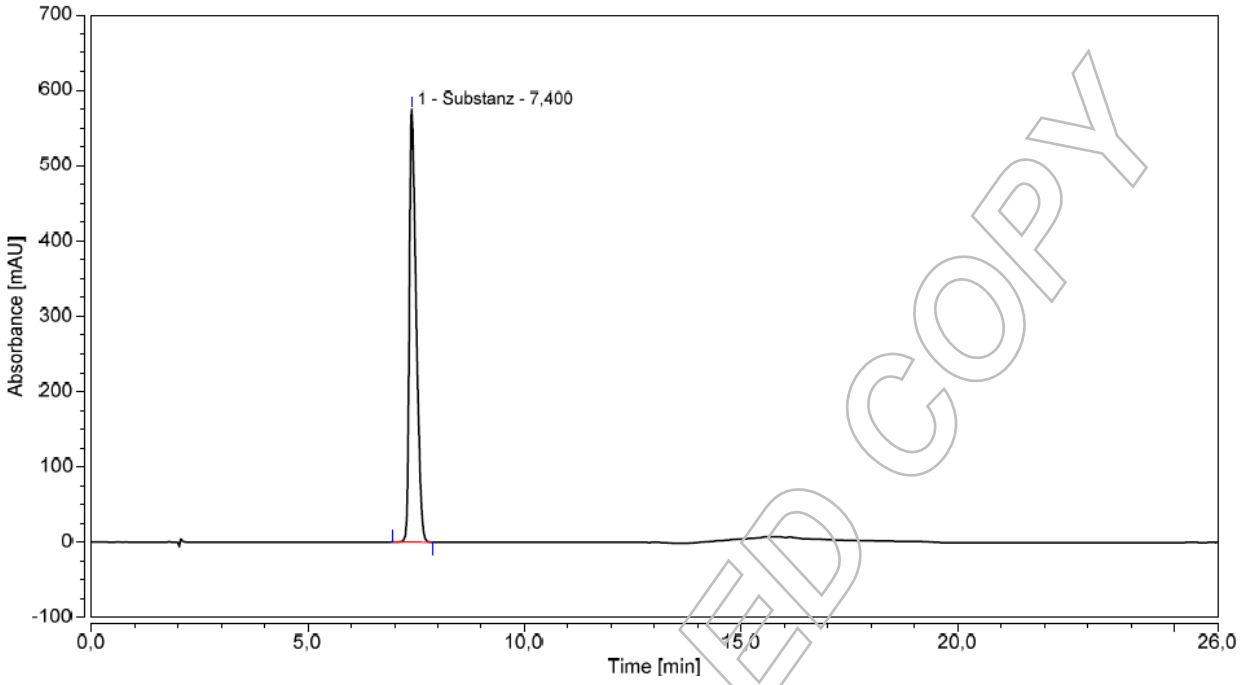
II. Purity

The purity of the reference substance was analysed by high performance liquid chromatography (HPLC).

HPLC Conditions:

Column:	**Conditions:**	**Detector:**	**Injector:**
Hypersil Gold (C18) 5 µm, 150 x 4.6 mm	1.0 ml/min, 40 °C 0-10 min Water/Acetonitrile 84/16 10-13 min Water/Acetonitrile to 30/70 13-16 min Water/Acetonitrile to 84/16 16-26 min Water/Acetonitrile 84/16 (v/v); 0.1 % H_3PO_4	DAD 210 nm	Auto 3 µl; 0.156 mg/ml in Water/Acetonitrile 50/50 (v/v)

LGC Standards
Excellence through measurement



Area Percent Report - Sorted by Signal

Pk #	Retention Time	Area	Area %
1	7.400	105.083	100.00
Totals		105.083	100.00

For the calculation the system peaks were ignored. The content of the analyte was determined as ratio of the peak area of the analyte and the cumulative areas of the purities, added up to 100 %.

Results:

Average	100 %
Number of results	n=3
Standard deviation	< 0.01 %

LGC Standards
Excellence through measurement

III. Water Content

Method: Karl Fischer titration

No significant amounts of water were detected (< 0.05 %).

IV. Residual Solvents

Method: ^{1}H-NMR

No significant amounts of residual solvents were detected (< 0.05 %).

V. Assay by Elementary Analysis

Method: percentage carbon found in relation to percentage carbon as calculated for molecular formula

Results:

Arithmetic mean (n=3)	98.86 % (mass fraction)

VI. Final Result

Total impurities (HPLC)	0.00 %
Water content	No significant amounts of water were detected (< 0.05 %).
Residual solvents	No significant amounts of residual solvents were detected (< 0.05 %).
Assay (Elementary Analysis)	98.86 %

The assay is assessed to be 98.9 % ‘as is’

The assay 'as is' is equivalent to the assay based on the not anhydrous and not dried substance respectively.

LGC Standards
Excellence through measurement