

CERTIFICATE of ANALYSIS



Phenethylamine Analytical Standards Panel

For R&D purposes only. Not intended for human or animal use.

Item No.:	31617
Batch No.:	0682556
Size:	100 µg/well
Expiry Date:	25SEP2028 (valid from date of certification)
Storage & Handling:	Store upright and unopened at -20°C. Warm to room temperature prior to opening.
Safety:	Danger. Review the Safety Data Sheets before use.

Description

This product consists of 96-well Matrix plates containing individual phenethylamine and phenethylamine-class standards. The individual well locations for each unique standard are listed in the table below.

Traceability Statement

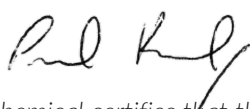
This kit was prepared from individual standards that have been verified through standard quality testing and are traceable via individual item and batch numbers. All compounds used to make this kit were used within their valid expiry dates. Stability testing of this kit is ongoing to ensure continuous quality and traceability of the materials.

Quality Testing

A single kit was pulled randomly from the batch and high resolution accurate mass analysis was performed to verify the contents of each vial position. A summary of results is reported below as the average ppm mass error $\pm$ standard deviation determined for all analytes.

Test	Result	Specification	Meets Specification
Average mass error	2.81 $\pm$ 1.02 ppm	$\pm$ 10 ppm	Yes

Individual results are reported in the table on pages 2-5.

Approval: 

Title: Director of Analytical Chemistry

Certification Date: 25SEP2023

Cayman Chemical certifies that this product meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the expiry date when stored unopened as recommended.

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Kit Contents Plate 1

Well	Item Name	Molecular Formula (free analyte)	Calculated [M+H] ⁺ m/z	Measured [M+H] ⁺ m/z	Mass Accuracy (ppm)
A1	Unused	Unused	Unused	Unused	Unused
A2	2-Phenethylamine (hydrochloride)	C ₈ H ₁₁ N	122.0970	122.0963	5.23
A3	25P-NBOMe (hydrochloride)	C ₂₁ H ₂₉ NO ₃	344.2226	344.2219	1.99
A4	N,N-Dimethylphenethylamine (hydrochloride)	C ₁₀ H ₁₅ N	150.1283	150.1277	4.06
A5	5-AEDB (hydrochloride)	C ₁₀ H ₁₃ NO	164.1075	164.1069	3.68
A6	Hordenine	C ₁₀ H ₁₅ NO	166.1232	166.1226	3.52
A7	TDIQ (hydrochloride)	C ₁₀ H ₁₁ NO ₂	178.0868	178.0861	3.81
A8	Homarylamine (hydrochloride)	C ₁₀ H ₁₃ NO ₂	180.1025	180.1019	3.10
A9	25T7-NBOMe (hydrochloride)	C ₂₁ H ₂₉ NO ₃ S	376.1946	376.1942	1.27
A10	3,4-Dimethoxyphenethylamine (hydrochloride)	C ₁₀ H ₁₅ NO ₂	182.1181	182.1175	3.40
A11	N-methyl Homarylamine (hydrochloride)	C ₁₁ H ₁₅ NO ₂	194.1181	194.1175	3.09
A12	Unused	Unused	Unused	Unused	Unused
B1	Unused	Unused	Unused	Unused	Unused
B2	2C-D (hydrochloride)	C ₁₁ H ₁₇ NO ₂	196.1338	196.1330	3.77
B3	25B-NB4OMe (hydrochloride)	C ₁₈ H ₂₂ BrNO ₃	380.0861	380.0856	1.30
B4	2C-G (hydrochloride)	C ₁₂ H ₁₉ NO ₂	210.1494	210.1486	3.75
B5	Mescaline (hydrochloride)	C ₁₁ H ₁₇ NO ₃	212.1287	212.1278	4.17
B6	2C-C (hydrochloride)	C ₁₀ H ₁₄ ClNO ₂	216.0791	216.0783	3.83
B7	25G-NBOMe (hydrochloride)	C ₂₀ H ₂₇ NO ₃	330.2069	330.2063	1.98
B8	2C-iP (hydrochloride)	C ₁₃ H ₂₁ NO ₂	224.1651	224.1642	3.70
B9	Escaline (hydrochloride)	C ₁₂ H ₁₉ NO ₃	226.1443	226.1435	3.82
B10	25H-NBOMe (hydrochloride)	C ₁₈ H ₂₃ NO ₃	302.1756	302.1750	2.23
B11	N-methyl Mescaline (hydrochloride)	C ₁₂ H ₁₉ NO ₃	226.1443	226.1435	3.86
B12	Unused	Unused	Unused	Unused	Unused

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Kit Contents Plate 1 Continued

Well	Item Name	Molecular Formula (free analyte)	Calculated [M+H] ⁺ m/z	Measured [M+H] ⁺ m/z	Mass Accuracy (ppm)
C1	Unused	Unused	Unused	Unused	Unused
C2	(±)-Lefetamine (hydrochloride)	C ₁₆ H ₁₉ N	226.1596	226.1587	3.80
C3	2C-N	C ₁₀ H ₁₄ N ₂ O ₄	227.1032	227.1023	3.73
C4	2C-T (hydrochloride)	C ₁₁ H ₁₇ NO ₂ S	228.1058	228.1050	3.77
C5	Allylescaline (hydrochloride)	C ₁₃ H ₁₉ NO ₃	238.1443	238.1436	3.12
C6	(S)-Desoxy-D2PM (hydrochloride)	C ₁₇ H ₁₉ N	238.1596	238.1587	3.52
C7	Proscaline (hydrochloride)	C ₁₃ H ₂₁ NO ₃	240.1600	240.1591	3.85
C8	2C-T-2 (hydrochloride)	C ₁₂ H ₁₉ NO ₂ S	242.1215	242.1205	4.09
C9	2C-TFM (hydrochloride)	C ₁₁ H ₁₄ F ₃ NO ₂	250.1055	250.1046	3.57
C10	25I-NBOMe 3-methoxy isomer (hydrochloride)	C ₁₈ H ₂₂ INO ₃	428.0723	428.0718	1.07
C11	2C-T-4 (hydrochloride)	C ₁₃ H ₂₁ NO ₂ S	256.1371	256.1361	3.99
C12	Unused	Unused	Unused	Unused	Unused
D1	Unused	Unused	Unused	Unused	Unused
D2	2C-B (hydrochloride)	C ₁₀ H ₁₄ BrNO ₂	260.0286	260.0281	2.15
D3	2-bromo-4,5-Dimethoxyphenethylamine (hydrochloride)	C ₁₀ H ₁₄ BrNO ₂	260.0286	260.0281	2.15
D4	Sibutramine (hydrochloride)	C ₁₇ H ₂₆ NCI	280.1832	280.1825	2.38
D5	2C-B-fly (hydrochloride)	C ₁₂ H ₁₄ BrNO ₂	284.0286	284.0281	1.80
D6	PRL-8-53 (hydrochloride)	C ₁₈ H ₂₁ NO ₂	284.1651	284.1643	2.71
D7	25H-NBOH (hydrochloride)	C ₁₇ H ₂₁ NO ₃	288.1600	288.1591	3.10
D8	25H-NBOMe imine analog	C ₁₈ H ₂₁ NO ₃	300.1600	300.1592	2.55
D9	BD 1008 (hydrobromide)	C ₁₅ H ₂₂ Cl ₂ N ₂	301.1238	301.1231	2.34
D10	Metaescaline (hydrochloride)	C ₁₂ H ₁₉ NO ₃	226.1443	226.1434	4.31
D11	25H-NB4OMe (hydrochloride)	C ₁₈ H ₂₃ NO ₃	302.1756	302.1749	2.33
D12	Unused	Unused	Unused	Unused	Unused

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Kit Contents Plate 1 Continued

Well	Item Name	Molecular Formula (free analyte)	Calculated [M+H] ⁺ m/z	Measured [M+H] ⁺ m/z	Mass Accuracy (ppm)
E1	Unused	Unused	Unused	Unused	Unused
E2	2C-I (hydrochloride)	C ₁₀ H ₁₄ INO ₂	308.0148	308.0138	2.97
E3	25D-NBOMe (hydrochloride)	C ₁₉ H ₂₅ NO ₃	316.1913	316.1906	2.16
E4	25C-NBOH (hydrochloride)	C ₁₇ H ₂₀ ClNO ₃	322.1210	322.1203	2.09
E5	25C-NBF (hydrochloride)	C ₁₇ H ₁₉ ClFNO ₂	324.1167	324.1160	2.18
E6	RH-34	C ₁₈ H ₁₉ N ₃ O ₃	326.1505	326.1496	2.61
E7	2C-P (hydrochloride)	C ₁₃ H ₂₁ NO ₂	224.1651	224.1641	4.37
E8	25E-NBOMe (hydrochloride)	C ₂₀ H ₂₇ NO ₃	330.2069	330.2061	2.47
E9	Mescaline NBOMe (hydrochloride)	C ₁₉ H ₂₅ NO ₄	332.1862	332.1853	2.83
E10	25C-NB3OMe (hydrochloride)	C ₁₈ H ₂₂ ClNO ₃	336.1367	336.1360	2.03
E11	25I-NBOMe (hydrochloride)	C ₁₈ H ₂₂ INO ₃	428.0723	428.0714	2.05
E12	Unused	Unused	Unused	Unused	Unused
F1	Unused	Unused	Unused	Unused	Unused
F2	25iP-NBOMe (hydrochloride)	C ₂₁ H ₂₉ NO ₃	344.2226	344.2219	2.07
F3	N-methyl-2-Phenylpropan-1-amine (hydrochloride)	C ₁₀ H ₁₅ N	150.1283	150.1276	4.59
F4	25N-NBOMe (hydrochloride)	C ₁₈ H ₂₂ N ₂ O ₅	347.1607	347.1598	2.63
F5	25T-NBOMe (hydrochloride)	C ₁₉ H ₂₅ NO ₃ S	348.1633	348.1627	1.91
F6	25T2-NBOMe (hydrochloride)	C ₂₀ H ₂₇ NO ₃ S	362.1790	362.1782	2.17
F7	25B-NBOH (hydrochloride)	C ₁₇ H ₂₀ BrNO ₃	366.0705	366.0699	1.63
F8	25B-NBF (hydrochloride)	C ₁₇ H ₁₉ BrFNO ₂	368.0661	368.0658	1.00
F9	2C-H (hydrochloride)	C ₁₀ H ₁₅ NO ₂	182.1181	182.1174	3.78
F10	25T4-NBOMe (hydrochloride)	C ₂₁ H ₂₉ NO ₃ S	376.1946	376.1940	1.85
F11	25B-NBOMe (hydrochloride)	C ₁₈ H ₂₂ BrNO ₃	380.0861	380.0857	1.09
F12	Unused	Unused	Unused	Unused	Unused

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Well	Item Name	Molecular Formula (free analyte)	Calculated [M+H] ⁺ m/z	Measured [M+H] ⁺ m/z	Mass Accuracy (ppm)
G1	Unused	Unused	Unused	Unused	Unused
G2	25B-NB3OMe (hydrochloride)	C ₁₈ H ₂₂ BrNO ₃	380.0861	380.0856	1.46
G3	2C-E (hydrochloride)	C ₁₂ H ₁₉ NO ₂	210.1494	210.1486	3.90
G4	30C-NBOMe (hydrochloride)	C ₂₀ H ₂₆ ClNO ₅	396.1578	396.1573	1.29
G5	25I-NBOH (hydrochloride)	C ₁₇ H ₂₀ INO ₃	414.0566	414.0557	2.29
G6	25I-NBF (hydrochloride)	C ₁₇ H ₁₉ FINO ₂	416.0523	416.0514	2.19
G7	25I-NBOMe imine analog	C ₁₈ H ₂₀ INO ₃	426.0566	426.0557	2.27
G8	2C-T-7 (hydrochloride)	C ₁₃ H ₂₁ NO ₂ S	256.1371	256.1360	4.49
G9	25I-NBOMe 4-methoxy isomer (hydrochloride)	C ₁₈ H ₂₂ INO ₃	428.0723	428.0715	1.82
G10	25C-NBOMe (hydrochloride)	C ₁₈ H ₂₂ ClNO ₃	336.1367	336.1360	1.94
G11	25I-NBMD (hydrochloride)	C ₁₈ H ₂₀ INO ₄	442.0515	442.0507	1.98
G12	Unused	Unused	Unused	Unused	Unused
H1	Unused	Unused	Unused	Unused	Unused
H2	N-acetyl 25I-NBOMe	C ₂₀ H ₂₄ INO ₄	470.0828	470.0822	1.31

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Revision History

Revision No.	Date	Reason for Revision
01	25SEP2023	Initial version
02	30SEP2024	Expiry date extension

Disclaimers

Material Safety Data

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some but not all of the information required for the safe and proper use of this material. Before use, review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

Warranty and Limitation of Remedy

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specification.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver of Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitations of Remedy located on our website and in our catalog.

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