



CERTIFICATE OF ANALYSIS

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1. Identification

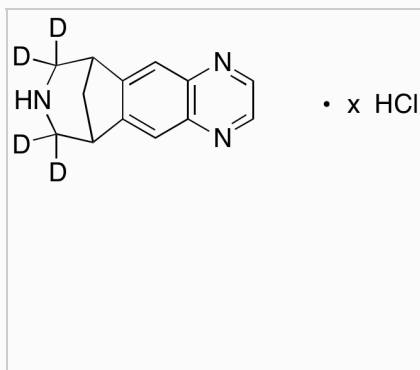
Catalogue Number: V098492

CAS Number: NA

Product: Varenicline-d4 Hydrochloride (Major)

Synonym: 7,8,9,10-Tetrahydro-6,10-methano-6H-pyrazino[2,3-h][3]benzazepine-d4 Hydrochloride

Structure:



Molecular Formula:

$C_{13}H_9D_4N_3 \cdot xHCl$

Molecular weight:

$215.29 + x(36.46)$

Source of Product:

Synthetic

Solubility:

DMSO (Slightly), Methanol (Slightly), Water (Slightly)

Lot Number: 5-PYL-104-1

Purity: 96%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Pale Yellow to Light Green Solid	Pale Green to Pale Yellow Solid
HPLC Purity	Report Result	97.71% (200 nm)
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 51.19, %H: 5.63, %N: 14.15
MS	Conforms to Structure	Conforms

Additional Information:

Normalized Intensity: d0 = 0.01%, d1 = 0.06%, d2 = 1.71%, d3 = 19.49%, d4 = 51.62%, d5 = 27.10%

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Swathi Reddy	Toni Rantanen	Christina Gouliaras	5/19/2023	5/17/2027