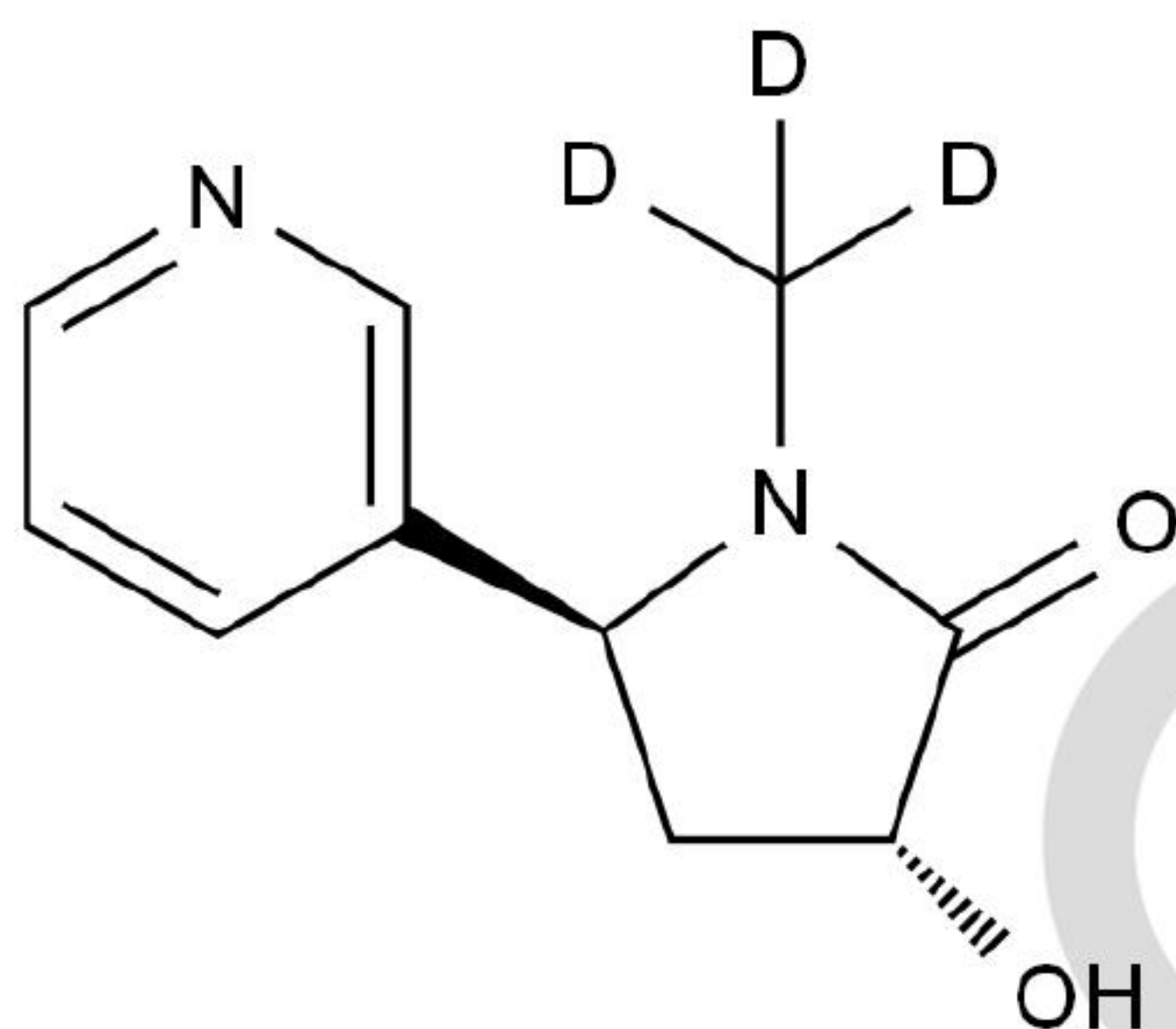


# Certificate of Analysis

## Reference Material & Standard

|                            |                                                |                          |                                           |
|----------------------------|------------------------------------------------|--------------------------|-------------------------------------------|
| <b>Product Name:</b>       | Trans-3'-Hydroxy Cotinine-d3 (Racemic Mixture) | <b>Catalogue Number:</b> | CCAD301930                                |
| <b>Synonyms:</b>           | N/A                                            | <b>Lot Number:</b>       | 0823-RE-0026                              |
| <b>CAS Number:</b>         | 159956-78-2                                    | <b>Expiry Date:</b>      | Aug 29, 2026                              |
| <b>Molecular Formula:</b>  | C10H9D3N2O2                                    | <b>Storage:</b>          | -20°C±5°C Protected from light and Sealed |
| <b>Molecular Weight:</b>   | 195.23                                         |                          |                                           |
| <b>Chemical Structure:</b> |                                                |                          |                                           |



| Test Items      | Method            | Results                  |
|-----------------|-------------------|--------------------------|
| Appearance      | Visual inspection | White to Off-White Solid |
| Identification  | LCMS&HNMR         | Confirmed                |
| Chemical Purity | HPLC              | 99.40%                   |
| Isotopic Purity |                   | 100.0%                   |
| Water Content   | Karl Fischer      | 4.30%                    |
| Assay           |                   | 95.1%                    |
| Uncertainty     |                   | ±2.0%                    |

## Comment:

1. The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity HPLC (\%)} / 100\%$

Water Content is considered as absolute effect, HPLC purity is considered as relative effect.

2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

## Signature:

Prepared by:

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Reviewed by:

*Hin Lam*

Approved by General Manager:

*David*

Date: Aug 29, 2023

Date: Aug 29, 2023

Date: Aug 29, 2023

