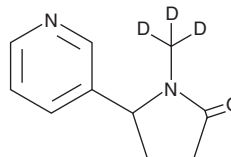


PRODUCT INFORMATION



(±)-Cotinine-d₃ Item No. 15805

CAS Registry No.: 110952-70-0
Formal Name: 1-(methyl-d₃)-5-(3-pyridinyl)-2-pyrrolidinone
MF: C₁₀H₉D₃N₂O
FW: 179.2
Chemical Purity: ≥98% (Cotinine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

(±)-Cotinine-d₃ is intended for use as an internal standard for the quantification of cotinine by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

(±)-Cotinine-d₃ is supplied as a solid. A stock solution may be made by dissolving the (±)-cotinine-d₃ in the solvent of choice. (±)-Cotinine-d₃ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of (±)-cotinine-d₃ in these solvents is approximately 30 mg/ml.

Description

Cotinine is an alkaloid found in tobacco and a major metabolite of nicotine (Item No. 16535).^{1,2} It is formed by oxidation of nicotine by the cytochrome P450 (CYP) isoform CYP2A6.²

References

1. Stålhandske, T. The metabolism of nicotine and cotinine by a mouse liver preparation. *Acta. Physiol. Scand.* **78(2)**, 236-248 (1970).
2. Murphy, S.E., Link, C.A., Jensen, J., et al. A comparison of urinary biomarkers of tobacco and carcinogen exposure in smokers. *Cancer Epidemiol. Biomarkers Prev.* **13(10)**, 1617-1623 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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