

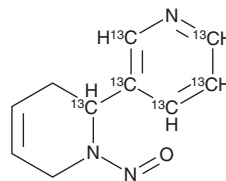
PRODUCT INFORMATION



(R,S)-N-Nitrosoanatabine-¹³C₆

Item No. 46114

CAS Registry No.: 2483736-32-7
Formal Name: 1,2,3,6-tetrahydro-1-nitroso-2,3'-bipyridine-2,2',3',4',5',6'-¹³C₆
Synonyms: N-NAT-¹³C₆, N'-Nitrosoanatabine-¹³C₆
MF: C₄[¹³C]₆H₁₁N₃O
FW: 195.2
Purity: ≥98%
Supplied as: A 100 µg/ml solution in acetonitrile
Storage: -20°C
Stability: ≥4 years



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

Description

(R,S)-N-Nitrosoanatabine-¹³C₆ (N-NAT-¹³C₆) is intended for use as an internal standard for the quantification of N-NAT (Item No. 33851) by GC- or LC-MS. N-NAT is a tobacco-specific nitrosamine (TSNA) that has been found in tobacco, tobacco products, and electronic cigarettes.^{1,2} The (S)-enantiomer comprises approximately 80% of the N-NAT found in commercial and research cigarettes and smokeless tobacco.³ Unlike other TSNA, N-NAT is not carcinogenic in rats when administered at doses of 1, 3, and 9 mmol/kg.¹

References

1. Hoffmann, D., Rivenson, A., Amin, S., *et al.* Dose-response study of the carcinogenicity of tobacco-specific N-nitrosamines in F344 rats. *J. Cancer Res. Clin. Oncol.* **108**(1), 81-86 (1984).
2. Kim, H.-J. and Shin, H.-S. Determination of tobacco-specific nitrosamines in replacement liquids of electronic cigarettes by liquid chromatography-tandem mass spectrometry. *J. Chromatogr. A* **1291**, 48-55 (2013).
3. Carmella, S.G., McIntee, E.J., Chen, M., *et al.* Enantiomeric composition of N'-nitrosonornicotine and N'-nitrosoanatabine in tobacco. *Carcinogenesis* **21**(4), 839-843 (2000).

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.

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