

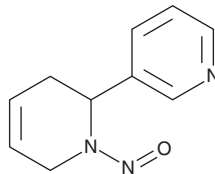
PRODUCT INFORMATION



(R,S)-N-Nitrosoanatabine

Item No. 33851

CAS Registry No.: 887407-16-1
Formal Name: 1,2,3,6-tetrahydro-1-nitroso-2,3'-bipyridine
Synonyms: N-NAT, N'-Nitrosoanatabine
MF: $C_{10}H_{11}N_3O$
FW: 189.2
Purity: $\geq 98\%$
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥ 2 years



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

Laboratory Procedures

(R,S)-N-Nitrosoanatabine (N-NAT) is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as chloroform and ethyl acetate purged with an inert gas can be used. N-NAT is slightly soluble in these solvents.

Description

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 TSNAs, 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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM