# **PRODUCT** INFORMATION

D, D



Mitragynine-d<sub>3</sub>

Item No. 18929

CAS Registry No.: Formal Name:	2135473-75-3 ( $\alpha$ E,2S,3S,12bS)-3-ethyl-1,2,3,4,6,7,12,12b- octahydro-8-methoxy-d <sub>3</sub> - $\alpha$ -(methoxymethylene)- indolo[2,3-a]quinolizine-2-acetic acid, methyl ester	
Synonym:	9-methoxy Corynantheidine-d <sub>3</sub>	
MF:	$C_{23}H_{27}D_{3}N_{2}O_{4}$	н́ н́
FW:	401.5	Н
Purity:	≥97%	
Supplied as:	A neat solid	_0
Storage:	-20°C	,
Stability:	≥3 years	

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

## Description

Mitragynine-d<sub>3</sub> (Item No. 18929) is an analytical reference material intended for use as an internal standard for the quantification of mitragynine (Item Nos. 11151 | 18567) 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).

Mitragynine is categorized as an opioid.<sup>1,2</sup> Mitragynine and its derivatives have been identified in products sold as incense.<sup>3</sup> This product is intended for research and forensic applications.

This product is gualified as a Reference Material that has been manufactured and tested to ISO/IEC 17025 and ISO 17034 international standards.

## References

- 1. Matsumoto, K., Mizowaki, M., Suchitra, T., et al. Central antinociceptive effects of mitragynine in mice: Contribution of descending noradrenergic and serotonergic systems. Eur. J. Pharmacol. 317(1), 75-81 (1996).
- 2. Takayama, H., Ishikawa, H., Kurihara, M., et al. Studies on the synthesis and opioid agonistic activities of mitragynine-related indole alkaloids: Discovery of opioid agonists structurally different from other opioid ligands. J. Med. Chem. 45(9), 1949-1956 (2002).
- 3. Kikura-Hanajiri, R., Uchiyama, N., and Goda, Y. Survey of current trends in the abuse of psychotropic substances and plants in Japan. Leg. Med. (Tokyo) 13(3), 109-115 (2011).

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

### SAFFTY 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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