

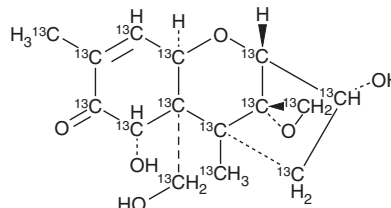
PRODUCT INFORMATION



4-deoxy Nivalenol-¹³C₁₅

Item No. 31249

CAS Registry No.: 911392-36-4
Formal Name: (3 α ,7 α)-12,13-epoxy-3,7,15-trihydroxy-trichothec-9-en-8-one-¹³C₁₅
Synonyms: Vomitoxin-¹³C₁₅, Deoxynivalenol-¹³C₁₅, DON-¹³C₁₅
MF: [¹³C]₁₅H₂₀O₆
FW: 311.2
Purity: \geq 98%
Supplied as: A 25 μ g/ml solution in acetonitrile
Storage: -20°C
Stability: \geq 1 year



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

Description

4-deoxy Nivalenol-¹³C₁₅ is intended for use as an internal standard for the quantification of 4-deoxy nivalenol (Item No. 11428) by GC- or LC-MS. 4-deoxy Nivalenol is a trichothecene mycotoxin that has been found in *Fusarium*.¹ It binds to eukaryotic ribosomes and inhibits protein synthesis in mice when administered at doses ranging from 5 to 25 mg/kg. 4-deoxy Nivalenol (0.1 and 0.2 mg/kg) induces emesis in pigs and decreases feed consumption in pigs when administered at a dose of 40 ppb in the diet.² It induces lethality in mice (LD₅₀ = 46-78 mg/kg).³ 4-deoxy Nivalenol has been found in *F. graminearum*-infected cereal grains such as wheat, barley, and corn.

References

1. Pestka, J.J. and Smolinski, A.T. Deoxynivalenol: Toxicology and potential effects on humans. *J. Toxicol. Environ. Health B. Crit. Rev.* **8(1)**, 39-69 (2005).
2. Forsyth, D.M., Yoshizawa, T., Morooka, N., *et al.* Emetic and refusal activity of deoxynivalenol to swine. *Appl. Environ. Microbiol.* **34(5)**, 547-552 (1977).
3. Pestka, J.J. Deoxynivalenol: Mechanisms of action, human exposure, and toxicological relevance. *Arch. Toxicol.* **84(9)**, 663-679 (2010).

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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