# PRODUCT INFORMATION



# <sup>13</sup>C<sub>15</sub>-Nivalenol Item No. 31259

CAS Registry No.: 911392-40-0

Formal Name:  $(3\alpha,4\beta,7\alpha)$ -12,13-epoxy-3,4,7,15-tetrahydroxy-

trichothec-9-en-8-one-13C<sub>15</sub>

 $[^{13}C]_{15}H_{20}O_7$ MF:

FW: 327.2 **Purity:** ≥98%

Supplied as: A 25 µg/ml solution in acetonitrile

Storage: -20°C Stability: ≥2 years

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



 $^{13}C_{15}$ -Nivalenol is intended for use as an internal standard for the quantification of nivalenol (Item  $\widetilde{\text{No}}$ . 11438) by GC- or LC-MS. Nivalenol is a trichothecene mycotoxin that has been found in *Fusarium*.  $^1$ It is lethal to mice  $(LD_{50} = 6.9 \text{ mg/kg})^2$  Nivalenol (5, 10, and 15 mg/kg) also induces thymic, splenic, and Peyer's patch cell apoptosis in mice.<sup>3</sup>

### References

- 1. Yang, Z., Concannon, J., Ng, K.S., et al. Tetrandrine identified in a small molecule screen to activate mesenchymal stem cells for enhanced immunomodulation. Sci. Rep. 6, 30263 (2016).
- Yoshizawa, T. and Morooka, N. Studies on the toxic substances in the infected cereals (part 3): Acute toxicities of new trichothecene mycotoxins: Deoxynivalenol and its monoacetate. J. Food Hyg. 15(4), 261-269 (1974).
- 3. Poapolathep, A., Ohtsuka, R., Kiatipattanasakul, W., et al. Nivalenol-induced apoptosis in thymus, spleen and Peyer's patches of mice. Exp. Toxicol. Pathol. 53(6), 441-446 (2002).

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

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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**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