

## PRODUCT DATA SHEET

Code No.: BIA-D1928

Pack sizes: 0.1 mg, 0.5 mg

Synonyms : DON, NSC 269144, Vomitoxin

## Specifications

Deoxynivalenol

CAS # : 51481-10-8 Molecular Formula :  $C_{15}H_{20}O_6$  Molecular Weight : 296.32

Source : Fusarium sp.

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in methanol or DMSO

## **Application Notes**

Deoxynivalenol is a trichothecene mycotoxin produced by various Fusarium sp. infecting grains. Deoxynivalenol has immunosuppressant activity, inducing activator protein-1 (AP-1) activity in the murine EL-4 thymoma model which may contribute to cytokine dysregulation and immunotoxic effects associated with exposure to trichothecene mycotoxins. Deoxynivalenol is an emetic and has weak Gram positive antibiotic activity.

## References

- 1. Fusarium species pathogenic to barley and their associated mycotoxins. Salas B. et al. Plant Dis. 1999, 83, 667.
- 2. Modulation of transcription factor AP-1 activity in murine EL-4 thymoma cells by vomitoxin (deoxynivalenol). Li S. et al. Tox Appl Pharmacol. 2000, 163, 17.
- Deoxynivalenol impairs the immune functions of neutrophils. Gauthier T. et al. Mol Nutr Food Res. 2013, 57, 1026.
- 4. Elaboration of vomitoxin and zearalenone by Fusarium isolates and the biological activity of Fusarium-produced toxins. Vesonder R.F. et al. Appl Env Microbiol. 1981, 42, 1132.

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