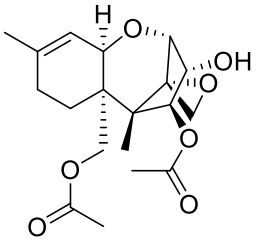
bioaustralis
fine chemicals

PRODUCT DATA SHEET

Diacetoxyscirpenol

Code No.: **BIA-D1929**

Pack sizes: **0.25 mg, 1 mg**



Synonyms : Anguidine, Anguidin, DAS, NSC 141537, NSC 177378

Specifications

CAS #	:	**2270-40-8**
Molecular Formula	:	**$C_{19}H_{26}O_7$**
Molecular Weight	:	**366.4**
Source	:	***Fusarium* sp.**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO.**

Application Notes

Diacetoxyscirpenol is a type A trichothecene mycotoxin produced by various Fusarium sp. infecting grains. Diacetoxyscirpenol is a potent inhibitor of human Jurkat T-cell line, inducing apoptosis by activation of caspase-8 and interruption of cell cycle progression by down-regulation of cdk4 and cyclin B1. Diacetoxyscirpenol inhibits hypoxia-inducible factor 1, which promotes the progression of malignancy by stimulating angiogenesis. Diacetoxyscirpenol induces anorexia in animal models, increasing the plasma levels of the gut satiety hormones peptide YY3-36 and glucose-dependent insulinotropic polypeptide.

References

1. Fusarium toxins of the scirpentriol subgroup: a review. Schollengerger M. et al. Mycopath. 2007, 164, 101.
2. Induction of apoptosis by disturbing mitochondrial-membrane potential and cleaving PARP in Jurkat T cells through treatment with acetoxyscirpenol mycotoxins. Lee D.H. et al. Biol Pharm Bull. 2006, 29, 648.
3. Cytotoxicity of diacetoxyscirpenol is associated with apoptosis by activation of caspase-8 and interruption of cell cycle progression by down-regulation of cdk4 and cyclin B1 in human Jurkat T cells. Jun D.Y. et al. Tox Appl Pharmacol. 2007, 222, 190.
4. Diacetoxyscirpenol as a new anticancer agent to target hypoxia-inducible factor 1. Choi Y.J. et al. Oncotarget 2016, 7, 62107.
5. Role of peptide YY3-36 and glucose-dependent insulinotropic polypeptide in anorexia Induction by Trichothecences T-2 toxin, HT-2 toxin, diacetoxyscirpenol and neosolaniol. Zhang J. et al. Toxicol Sci. 2017, 159, 203.

For in vitro laboratory use only. Not for human or animal use.

Updated: 14 November 2025

© Copyright BioAustralis 2025

Building C, 28-54 Percival Road, Smithfield, NSW 2164, AUSTRALIA

Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com