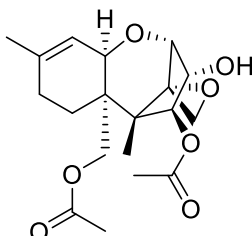


Diacetoxyscirpenol

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	: 366.41
Source	: <i>Fusarium sp.</i>
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 Trichothecenes T-2 toxin, HT-2 toxin, diacetoxyscirpenol and neosolaniol. Zhang J. et al. Toxicol Sci. 2017, 159, 203.