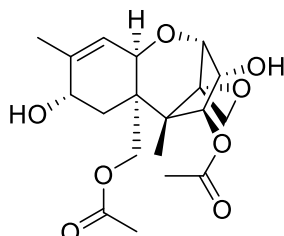


Neosolaniol

Code No.: **BIA-N1931**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms : NSC 197212, Neozolaniol, Solaniol, Solaniol

Specifications

CAS #	: 36519-25-2
Molecular Formula	: C ₁₉ H ₂₆ O ₈
Molecular Weight	: 382.4
Source	: <i>Fusarium</i> sp.
Appearance	: White solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Neosolaniol (solaniol), a trichothecene mycotoxin produced by *Fusarium* sp., is a metabolite of T-2 toxin. Neosolaniol is cytotoxic to human renal proximal tubule epithelial cells (RPTEC) and normal human lung fibroblasts (NHLF) with IC₅₀ 0.7–3.0 M albeit less potent than T-2 toxin. The parent T-2 toxin strongly induces apoptosis, however hydrolysis of T-2 at the C-8 position to neosolaniol diminishes the latter's ability to induce DNA fragmentation. Neosolaniol inhibits synthesis of the disease resistance protein AvrRpm1 in *Arabidopsis thaliana*.

References

1. Solaniol, a toxic metabolite of *Fusarium solani*. Ishii K. et al. 1971. Appl Microbiol. 1971, 22, 718.
2. Oxidative stress-mediated cytotoxicity and metabolism of T-2 toxin and deoxynivalenol in animals and humans: an update. Wu Q-H. et al. Arch Toxicol. 2014, 88, 1309.
3. Structure-function relationship of T-2 toxin and its metabolites in inducing thymic apoptosis in vivo in mice. Islam Z. et al. Biosci Biotechnol Biochem. 1998, 62, 1492.
4. A chemical screen for suppressors of the avrRpm1-RPM1-dependent hypersensitive cell death response in *Arabidopsis thaliana*. Serrano M. et al. Planta 2010, 231, 1013.