

Product Information

Product ID T0002

CAS No. 21259-20-1

Chemical Name

Synonym Insariotoxin, T2 Trichothecene

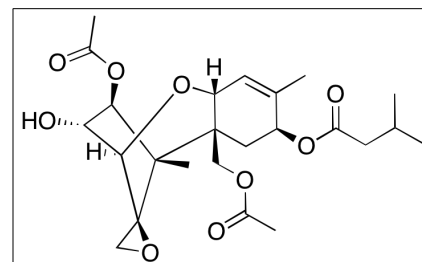
Formula C₂₄H₃₄O₉

Formula Wt. 466.52

Melting Point 151-152 °C

Purity ≥98%

Solubility Dichloromethane, DMSO, Ethanol, Ethyl Acetate.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
T0002	1 mg	\$84.50
T0002	5 mg	\$332.50
T0002	10 mg	\$591.70

Store Temp 4 °C

Ship Temp Ambient

Description T2 toxin is a trichothecene mycotoxin initially produced by species of *Fusarium*. T2 toxin is often found in grains and grain products such as cereals and breads. T2 toxin may act as an anticoagulant at low doses, decreasing fibrinolytic and coagulant signaling pathways. In vivo, T2 toxin alters permeability of the blood-brain barrier (BBB). In the brain and spleen, T2 toxin induces oxidative stress by decreasing levels of glutathione and increasing levels of ROS and lipid peroxidation; it also decreases expression of tissue inhibitor of metalloproteinase 1 (TIMP-1) and increases expression of matrix metalloproteinase 9 (MMP9), TNF-α, IL-1β, and IL-6. In vitro, T2 toxin alters steroidogenesis by inhibiting production of follicular-stimulating hormone (FSH) and progesterone and inhibiting the stimulatory effects of IFG-1.

References Xu X, Madden LV, Edwards SG. Modeling the Effects of Environmental Conditions on HT2 and T2 Toxin Accumulation in Field Oat Grains. *Phytopathology*. 2014 Jan;104(1):57-66. PMID: 23883158.

Ravindran J, Agrawal M, Gupta N, et al. Alteration of blood brain barrier permeability by T-2 toxin: Role of MMP-9 and inflammatory cytokines. *Toxicology*. 2011 Feb 4;280(1-2):44-52. PMID: 21112371.

Caloni F, Ranzenigo G, Cremonesi F, et al. Effects of a trichothecene, T-2 toxin, on proliferation and steroid production by porcine granulosa cells. *Toxicon*. 2009 Sep 1;54(3):337-44. PMID: 19463844.

Johnsen H, Odden E, Johnsen BA, et al. Cytotoxicity and effects of T2-toxin on plasma proteins involved in coagulation, fibrinolysis and kallikrein-kinin system. *Arch Toxicol*. 1988 Jan;61(3):237-40. PMID: 3281632.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.