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## Product Data Sheet

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Product Name: Tentoxin  
 Cat. No.: GC19424

### Chemical Properties

Cas. No. 28540-82-1

Chemical Name cyclo[N-methyl-L-alanyl-L-leucyl-( $\alpha$ Z)- $\alpha,\beta$ -didehydro-N-methylphenylalanylglycyl]

SMILES O=C(/C(N(C)C([C@H](CC(C)C)NC([C@H](C)N1C)=O)=O)=C\C2=CC=CC=C2)NCC1=O

Formula  $C_{22}H_{30}N_4O_4$  M.Wt 414.5

Solubility Methanol/DMSO: 10mg/ml Storage Store at  $-20^{\circ}C$

General tips For obtaining a higher solubility , please warm the tube at  $37^{\circ}C$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}C$  for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

### Background

Tentoxin is a cyclic tetrapeptide first isolated from the plant pathogen *A. alternata*. It is an herbicide that inhibits chloroplast development, resulting in chlorotic tissue.<sup>1,2</sup> Tentoxin is selectively phytotoxic, as it kills a number of important weeds at concentrations that have no effects on several important crops.<sup>1</sup>

Reference:

1. Duke, S.O., Cantrell, C.L., Meepagala, K.M., et al. Natural toxins for use in pest management *Toxins* (Basel) 2(8), 1943-1962 (2010).
2. Duke, S.O., and Dayan, F.E. Modes of action of microbially-produced phytotoxins *Toxins* (Basel) 3(8), 1038-1064 (2011).

**Caution: Product has not been fully validated for medical applications. For research use only.**

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