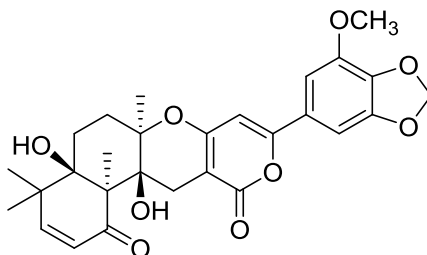


## Territrems A

Code No.: **BIA-T1822**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms :

## Specifications

|                   |                                                     |
|-------------------|-----------------------------------------------------|
| CAS #             | : <b>70407-19-1</b>                                 |
| Molecular Formula | : <b>C<sub>28</sub>H<sub>30</sub>O<sub>9</sub></b>  |
| Molecular Weight  | : <b>510.5</b>                                      |
| Source            | : <b><i>Aspergillus terreus</i></b>                 |
| Appearance        | : <b>White solid</b>                                |
| Purity            | : <b>&gt;95% by HPLC</b>                            |
| Long Term Storage | : <b>-20°C</b>                                      |
| Solubility        | : <b>Soluble in ethanol, methanol, DMF or DMSO.</b> |

## Application Notes

Territrems A is an  $\alpha$ -pyrone tremorgenic mycotoxin first identified from an *Aspergillus terreus* strain by Ling and colleagues at Taiwan National University in 1979. Territrems A is a potent insecticide acting via irreversible inhibition of acetylcholinesterase (AChE). The binding mechanism is very different from typical irreversible AChE inhibitors like neostigmine and the organophosphates.

## References

1. Territrems, tremorgenic mycotoxins of *Aspergillus terreus*. Ling K.L. et al., Appl. Env. Microbiol. 1979, 37, 355.
2. Toxicity and anticholinesterase activity of the fungal metabolites territrems to the corn earworm, *Helicoverpa zea*. Dowd P.F. et al., Entomol. Exp. Appl. 1992, 65, 57.
3. Territrems B, a tremorgenic mycotoxin that inhibits acetylcholinesterase with a noncovalent yet irreversible binding mechanism. Jen-Wei Chen J-W. et al., J. Biol. Chem. 1999, 274, 34916.
4. Role of human hepatic cytochrome P-450s in territrems A metabolism. Peng F.C. et al., J. Toxicol. Environ. Health A. 2003, 11, 66, 1237.