

# PRODUCT INFORMATION



## Aspergillimide

Item No. 27738

**CAS Registry No.:** 195966-93-9  
**Formal Name:** (1R,3'R,5aR,8aR,9aS)-rel(-)-tetrahydro-1,1',8,8,11-pentamethyl-spiro[5H,6H-5a,9a-(iminomethano)-1H-cyclopent[f]indolizine-7(8H),3'-pyrrolidine]-2',5',10-trione

**Synonyms:** Asperparaline A, VM 55598

**MF:** C<sub>20</sub>H<sub>29</sub>N<sub>3</sub>O<sub>3</sub>

**FW:** 359.5

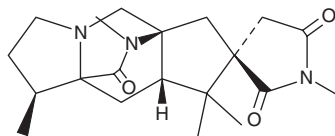
**Purity:** ≥98%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

**Item Origin:** Fungi/*Aspergillus* sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Aspergillimide is supplied as a solid. A stock solution may be made by dissolving the aspergillimide in the solvent of choice. Aspergillimide is soluble in organic solvents such as ethanol, methanol, and DMSO, which should be purged with an inert gas.

### Description

Aspergillimide is a fungal metabolite originally isolated from *A. japonicus*.<sup>1</sup> It reduces nicotinic acetylcholine receptor (nAChR) peak and slowly-desensitizing amplitudes induced by acetylcholine in silkworm (*B. mori*) larval neurons (IC<sub>50</sub>s = 20.2 and 39.6 nM, respectively) but has no effect on chicken α3β4-, α4β2-, and α7-containing nAChRs.<sup>2</sup> Dietary administration of aspergillimide (10 μg/g of diet) induces paralysis in silkworm fourth instar larvae.<sup>1</sup> Aspergillimide (10 and 20 mg/kg) reduces *T. colubriformis* fecal egg count in gerbils.<sup>3</sup>

### References

1. Hayashi, H., Nishimoto, Y., Akiyama, K., *et al.* New paralytic alkaloids, asperparalines A, B and C, from *Aspergillus japonicus* JV-23. *Biosci. Biotechnol. Biochem.* **64**(1), 111-115 (2000).
2. Hirata, K., Kataoka, S., Furutani, S., *et al.* A fungal metabolite asperparaline a strongly and selectively blocks insect nicotinic acetylcholine receptors: The first report on the mode of action. *PLoS One* **6**(4), e18354 (2011).
3. Banks, R.M., Blanchflower, S.E., Everett, J.R., *et al.* Novel anthelmintic metabolites from an *Aspergillus* species; the aspergillimides. *J. Antibiot. (Tokyo)* **50**(10), 840-846 (1997).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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