## **Product** Data Sheet

## Herbicidin A

 Cat. No.:
 HY-124438 

 CAS No.:
 55353-31-6 

 Molecular Formula:
  $C_{23}H_{29}N_5O_{11}$  

 Molecular Weight:
 551.5 

Target: Fungal; Antibiotic
Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Herbicidin A is an adenosine-derived nucleoside antibiotic, but also is a herbicide against dicotyledonous plants. Herbicidin A can be isolated from Streptomyces scopuliridis $M40^{[1][2]}$ .
In Vitro	Herbicidin A is the most extensively decorated herbicidin to date, which has a 5-hydroxytiglyl group at C8 <sup>[1]</sup> . The precursors for herbicidin biosynthesis are D-glucose, D-ribose, Lisoleucine, and L-methionine <sup>[1]</sup> . Herbicidins are selective herbicide against dicotyledonous plants and inhibit the germination of Chinese cabbage and rice seeds <sup>[1]</sup> . Herbicidins can protect rice plants from leaf blight and also exhibit antialgal and antifungal activities <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Lin GM, et al. Identification and Interrogation of the Herbicidin Biosynthetic Gene Cluster: First Insight into the Biosynthesis of a Rare Undecose Nucleoside Antibiotic. J Am Chem Soc. 2017 Nov 22;139(46):16450-16453.

[2]. Ha S, et al. Optimization of Herbicidin A Production in Submerged Culture of Streptomyces scopuliridis M40. J Microbiol Biotechnol. 2017 May 28;27(5):947-955.

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

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