## **Product** Data Sheet

## Tebufenozide-d<sub>9</sub>

 Cat. No.:
 HY-B2054S

 CAS No.:
 2469006-89-9

 Molecular Formula:
 C<sub>22</sub>H<sub>19</sub>D<sub>9</sub>N<sub>2</sub>O<sub>2</sub>

Molecular Weight: 361.53

Target: Apoptosis

Pathway: Apoptosis

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Tebufenozide-d <sub>9</sub> is the deuterium labeled Tebufenozide[1]. Tebufenozide is a nonsteroidal ecdysone agonist used to control pest. Tebufenozide has cytotoxic and induces apoptosis in HeLa and insect Tn5B1-4 cells[2][3].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

[2]. Muhammad Fiaz, et al. Toxicological and Morphological Effects of Tebufenozide on Anticarsia Gemmatalis (Lepidoptera: Noctuidae) Larvae. Chemosphere. 2018 Dec;212:337-345.

[3]. Xiaoqin Yu, et al. Cytotoxic Effects of Tebufenozide in Vitro Bioassays. Ecotoxicol Environ Saf. 2016 Jul 129:180-8.

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

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