## **Product** Data Sheet

## Cyfluthrin

**Cat. No.:** HY-B1837 **CAS No.:** 68359-37-5

Molecular Formula: C<sub>22</sub>H<sub>18</sub>Cl<sub>2</sub>FNO<sub>3</sub>

Molecular Weight: 434.29

Target: Sodium Channel

Pathway: Membrane Transporter/Ion Channel

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Cyfluthrin is a type II pyrethroid and has effects on various insects. Cyfluthrin is a modulator of Nav $_{1.8}$ sodium channels by repetitive stimulation. Cyfluthrin can be applied in agriculture, veterinary, insecticide, pyrethroid and stored product $^{[1][2]}$ .
IC <sub>50</sub> & Target	Nav1.8
In Vitro	Cyfluthrin (0-50 $\mu$ M; 24 hours) is against SH-SY5Y cell growth with an IC $_{50}$ and an IC $_{30}$ of 19.39 $\mu$ M and 4.81 $\mu$ M, respectively [1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

 $[1]. \ Jin-Sung \ Choi, et\ al. Structure-activity\ Relationships\ for\ the\ Action\ of\ 11\ Pyrethroid\ Insecticides\ on\ Rat\ Na\ v\ 1.8\ Sodium\ Channels\ Expressed\ in\ Xenopus\ Oocytes. Toxicol\ Appl\ Pharmacol.\ 2006\ Mar\ 15;211(3):233-44$ 

[2]. María-Aránzazu Martínez, et al. Oxidative Stress and Related Gene Expression Effects of Cyfluthrin in Human Neuroblastoma SH-SY5Y Cells: Protective Effect of Melatonin. Environ Res. 2019 Oct;177:108579.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA