Hexythiazox

Cat. No.: HY-B1851

CAS No.: 78587-05-0

Molecular Formula: $C_{17}H_{21}ClN_2O_2S$

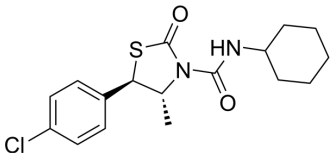
Molecular Weight: 352.88

Target: Parasite

Pathway: Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (283.38 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8338 mL	14.1691 mL	28.3382 mL
	5 mM	0.5668 mL	2.8338 mL	5.6676 mL
	10 mM	0.2834 mL	1.4169 mL	2.8338 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.08 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Hexythiazox is a selective acaricide with ovicidal, larvicidal and nymphicidal activities. Hexythiazox is widely used for chemical control of mites on cotton, fruits and vegetables. Hexythiazox is harmless to mammals and has no effect on beneficial insects and predators of mites[1][2].

IC_{50} & Target

Mite

In Vitro

Hexythiazox is dissipated easily in strawberries, with the half-life ranging from 3.43 to 3.59 days[1].
Hexythiazox induces toxicity in larvae of the two-spotted spider mite, Tetranychus uritcae, and the European red mite, Panonychus ulmi with LC_{50} values of 0.15-0.58 mg AI/L and 0.23-0.62 mg AI/L, respectively[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ayman N Saber, et al. Dissipation Dynamic, Residue Distribution and Processing Factor of Hexythiazox in Strawberry Fruits Under Open Field Condition. Food Chem. 2016 Apr 1;196:1108-16.

[2]. R Nauen, et al. Acaricide Toxicity and Resistance in Larvae of Different Strains of Tetranychus Urticae and Panonychus Ulmi (Acari: Tetranychidae). Pest Manag Sci. 2001 Mar;57(3):253-61.

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