Amoscanate

Cat. No.: HY-129051

CAS No.: 26328-53-0

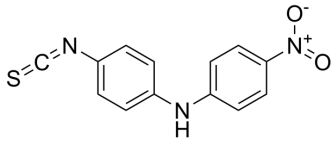
Molecular Formula: $C_{13}H_9N_3O_2S$

Molecular Weight: 271

Target: Parasite; Oxidative Phosphorylation

Pathway: Anti-infection; Others

Storage: 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (184.50 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.6900 mL	18.4502 mL	36.9004 mL
	5 mM	0.7380 mL	3.6900 mL	7.3801 mL
	10 mM	0.3690 mL	1.8450 mL	3.6900 mL

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

BIOLOGICAL ACTIVITY

Description

Amoscanate (cgp4540) is phenyl isothiocyanate in which the hydrogen at the para-position has been replaced by a 4-nitroanilinyl group. Amoscanate is an anti-schistosomal agent. Amoscanate, as an isothiocyanate compound and uncoupler of oxidative phosphorylation, potently injures rodent ependyma[1].

IC_{50} & Target

Schistosome

In Vivo

Amoscanate (500 mg/kg; p.o.; 10 days) destructs ependyma and periventricular brain[1].
Amoscanate (250 and 500 mg/kg; p.o.; 28 days) elicits necrosis, Ca^{++}-positive microgranules, pyknosis and edema localized in ependyma/subependyma in the medial striatum[1].
Amoscanate (25~500 mg/kg; p.o.; 20 days) elicits progressive necrosis of ependyma[1].
Amoscanate elicits massive ultrastructural damage in ependymal cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Sprague-Dawley rats[1]
Dosage:	500 mg/kg

Administration:	P.o.; 10 days
Result:	Destructed ependyma and periventricular brain.

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Dosage:	250 and 500 mg/kg
Administration:	P.o.; 28 days
Result:	Elicited necrosis, Ca^{++}-positive microgranules, pyknosis and edema localized in ependyma/subependyma in the medial striatum.

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Dosage:	25~500 mg/kg
Administration:	P.o.; 20 days
Result:	Elicited progressive necrosis of ependymal.

REFERENCES

[1]. Johanson C, et al. The distributional nexus of choroid plexus to cerebrospinal fluid, ependyma and brain: toxicologic/pathologic phenomena, periventricular destabilization, and lesion spread. Toxicol Pathol. 2011;39(1):186-212.

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