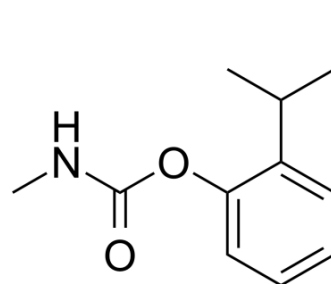


Fenobucarb

Cat. No.:	HY-B0835		
CAS No.:	3766-81-2		
Molecular Formula:	C ₁₂ H ₁₇ NO ₂		
Molecular Weight:	207.27		
Target:	Others		
Pathway:	Others		
Storage:	Pure form	-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 (482.46 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mM	4.8246 mL	24.1231 mL
5 mM	0.9649 mL	4.8246 mL	9.6493 mL		
10 mM	0.4825 mL	2.4123 mL	4.8246 mL		

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (12.06 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (12.06 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (12.06 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fenobucarb is a carbamate insecticide. Fenobucarb induces zebrafish developmental neurotoxicity through pathways involved in inflammation, oxidative stress, degeneration and apoptosis. Fenobucarb is a possible risk factor to cardiovascular and cerebrovascular systems in animals^{[1][2]}.

REFERENCES

[1]. Xiao-Yu Zhu, et al. Fenobucarb-induced developmental neurotoxicity and mechanisms in zebrafish. *Neurotoxicology*. 2020 Jul;79:11-19.

[2]. Xiao-Yu Zhu, et al. Fenobucarb induces heart failure and cerebral hemorrhage in zebrafish. *Aquat Toxicol*. 2019 Apr;209:34-41.

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

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