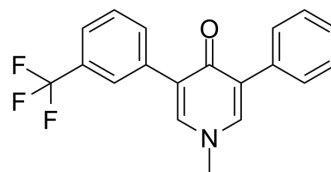


Fluridone

Cat. No.:	HY-134094
CAS No.:	59756-60-4
Molecular Formula:	C ₁₉ H ₁₄ F ₃ NO
Molecular Weight:	329.32
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (759.14 mM; ultrasonic and warming and heat to 60°C)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		3.0366 mL	15.1828 mL	30.3656 mL
	5 mM		0.6073 mL	3.0366 mL	6.0731 mL
	10 mM		0.3037 mL	1.5183 mL	3.0366 mL

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

BIOLOGICAL ACTIVITY

Description

Fluridone is a herbicide, particularly to eliminate aquatic plant growth in water reservoirs and irrigation channels. Fluridone is a potent Absciscic acid (ABA) biosynthesis inhibitor, and has anti-inflammatory effects^{[1][2]}.

In Vitro

Fluridone (0.5-50 µM; for 4 days) inhibits the proliferation of aortic smooth muscle cells and reduces proliferation and cytokine release by human activated lymphocytes. In stimulated human monocytes, Fluridone inhibits COX-2 expression and the release of MCP-1 and prostaglandin-E2. Fluridone also inhibits the release from stimulated human monocytes of abscisic acid^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay^[1]

Cell Line:	Lymphocytes
Concentration:	0.5 µM, 2 µM, 5 µM, 50 µM
Incubation Time:	for 4 days
Result:	Inhibited the proliferation of aortic smooth muscle cells.

In Vivo

Fluridone (8.25 mg/kg; i.p.; once) reduces peritoneal inflammation in Zymosan-treated mice^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male CD mice (20-22 g) treated with Zymosan ^[1]
Dosage:	8.25 mg/kg
Administration:	i.p.; once
Result:	Reduced peritoneal inflammation in Zymosan-treated mice.

REFERENCES

[1]. Mirko Magnone, et al. Fluridone as a new anti-inflammatory drug. Eur J Pharmacol. 2013 Nov 15;720(1-3):7-15.

[2]. Wei X, et al. MYB41, MYB107, and MYC2 promote ABA-mediated primary fatty alcohol accumulation via activation of AchnFAR in wound suberization in kiwifruit. Hortic Res. 2020;7(1):86.

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

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