# Inhibitors

# Haloxyfop

Cat. No.: HY-B1856 CAS No.: 69806-34-4 Molecular Formula:  $C_{15}H_{11}ClF_3NO_4$ 

Molecular Weight: 361.7

Target: Acetyl-CoA Carboxylase Pathway: Metabolic Enzyme/Protease

Storage:

Powder

-20°C 3 years

In solvent

4°C 2 years -80°C 6 months

-20°C 1 month

**Product** Data Sheet

# **SOLVENT & SOLUBILITY**

# In Vitro

DMSO: 100 mg/mL (276.47 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7647 mL	13.8236 mL	27.6472 mL
	5 mM	0.5529 mL	2.7647 mL	5.5294 mL
	10 mM	0.2765 mL	1.3824 mL	2.7647 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.91 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility: ≥ 2.5 mg/mL (6.91 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description	Haloxyfop is an aryloxyphenoxypropionic acid herbicide and is widely used in grass weeds in broad-leaf crops <sup>[2]</sup> . Haloxyfop inhibits the acetyl coenzyme A carboxylase (EC 6.4.1.2) from corn seedling chloroplasts with an IC <sub>50</sub> of 0.5 $\mu$ M, but has no effect on this enzyme in pea <sup>[2]</sup> .
IC <sub>50</sub> & Target	IC50: 0.5 $\mu$ M (acetyl coenzyme A carboxylase (EC 6.4.1.2)) $^{[2]}$

## **REFERENCES**

	al. Method Development and lass Spectrometry. Anal Bioar		alysis in Infant Formulas and Related I	ngredient Matrices Using Liquid		
[2]. J D Burton, et al. Inhibition of Plant Acetyl-Coenzyme A Carboxylase by the Herbicides Sethoxydim and Haloxyfop. Biochem Biophys Res Commun						
	Caution: Product has	not been fully validated for m	edical applications. For research (	use only.		
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Page 2 of 2 www.MedChemExpress.com