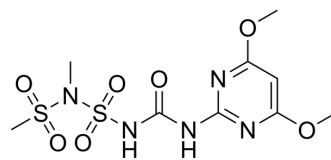


Amidosulfuron

Cat. No.:	HY-B1912		
CAS No.:	120923-37-7		
Molecular Formula:	C ₉ H ₁₅ N ₅ O ₇ S ₂		
Molecular Weight:	369.37		
Target:	Others		
Pathway:	Others		
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 : 125 mg/mL (338.41 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7073 mL	13.5366 mL	27.0731 mL
	5 mM	0.5415 mL	2.7073 mL	5.4146 mL
	10 mM	0.2707 mL	1.3537 mL	2.7073 mL

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

BIOLOGICAL ACTIVITY

Description	Amidosulfuron is a herbicide. Amidosulfuron targets acetohydroxyacid synthase (AHAS), is highly effective against dicot broad-leaf weeds ^{[1][2]} .
IC ₅₀ & Target	acetohydroxyacid synthase ^[1]
In Vitro	Amidosulfuron (foliar-sprayed with 0.2 mg a.i./L) reduces photosynthetic rate and the contents of leaf chlorophyll, soluble sugar and pyruvate, as well as content alteration of several free amino acids in the treated plants ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Cheng Y, et al. Crystal Structure of the Commercial Herbicide, Amidosulfuron, in Complex with Arabidopsis thaliana Acetohydroxyacid Synthase. J Agric Food Chem. 2023 Apr 5;71(13):5117-5126.

[2]. Liu XQ, et al. Acetolactate Synthase-Inhibiting Gametocide Amidosulfuron Causes Chloroplast Destruction, Tissue Autophagy, and Elevation of Ethylene Release in Rapeseed. *Front Plant Sci.* 2017 Sep 21;8:1625.

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

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