Data Sheet (Cat.No.T19761)

TargetMol
A DRUG SCREENING EXPERT

Sulfometuron-methyl

Chemical Properties

CAS No.:	74222-97-2
Formula:	C15H16N4O5S
Molecular Weight:	364.38
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Sulfometuron-methyl is a herbicide and also is an active antibacterial agent. It is an effective inhibitor of acetolactate synthase II and thus shows antibacterial properties.

Solubility Information

Solubility	DMSO: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.744 mL	13.722 mL	27.444 mL
5 mM	0.549 mL	2.744 mL	5.489 mL
10 mM	0.274 mL	1.372 mL	2.744 mL
50 mM	0.055 mL	0.274 mL	0.549 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. LaRossa RA, Smulski DR. ilvB-encoded acetolactate synthase is resistant to the herbicide sulfometuron methyl. J Bacteriol. 1984 Oct;160(1):391-4. PubMed PMID: 6090425; PubMed Central PMCID: PMC214730.
2. LaRossa RA, Schloss JV. The sulfonylurea herbicide sulfometuron methyl is an extremely potent and selective inhibitor of acetolactate synthase in Salmonella typhimurium. J Biol Chem. 1984 Jul 25;259(14):8753-7. PubMed PMID: 6378902.
3. Michael JL. Environmental fate and impacts of sulfometuron on watersheds in the southern United States. J Environ Qual. 2003 Mar-Apr;32(2):456-65. PubMed PMID: 12708668.
4. Yadav N, McDevitt RE, Benard S, Falco SC. Single amino acid substitutions in the enzyme acetolactate synthase confer resistance to the herbicide sulfometuron methyl. Proc Natl Acad Sci U S A. 1986 Jun;83(12):4418-22. PubMed PMID: 16593715; PubMed Central PMCID: PMC323744.

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