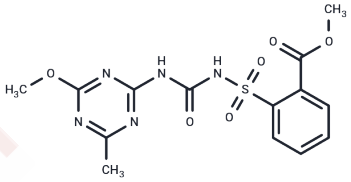
Data Sheet (Cat.No.T21246)

TargetMol

Metsulfuron-methyl

Chemical Properties



CAS No. : 74223-64-6

Formula: C14H15N5O6S

Molecular Weight: 381.36

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Metsulfuron-methyl is a systemic selective wheat field high-efficiency sulfonylurea herbicide, which mainly controls most broadleaf weeds and grass weeds in wheat fields.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 50 mg/mL (131.11 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.24 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6222 mL	13.111 mL	26.2219 mL
5 mM	0.5244 mL	2.6222 mL	5.2444 mL
10 mM	0.2622 mL	1.3111 mL	2.6222 mL
50 mM	0.0524 mL	0.2622 mL	0.5244 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

de Santo FB, et al. Screening effects of metsulfuron-methyl to collembolans and earthworms: the role of adjuvant addition on ecotoxicity. Environ Sci Pollut Res Int. 2018 Aug;25(24):24143-24149.
Pernak J, et al. Metsulfuron-methyl-based herbicidal ionic liquids. J Agric Food Chem. 2015 Apr 8;63(13):3357-66.
Guangyang Liu, et al. Visual and Colorimetric Sensing of Metsulfuron-Methyl by Exploiting Hydrogen Bond-Induced Anti-Aggregation of Gold Nanoparticles in the Presence of Melamine. Sensors (Basel). 2018 May 17;18(5):1595.

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