

Glyphosate

Chemical Properties

CAS No. :	1071-83-6
Formula:	C ₃ H ₈ NO ₅ P
Molecular Weight:	169.07
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	Glyphosate (Atila) is an herbicide. It also is a possible carcinogen to humans.
Targets(IC50)	Apoptosis, Autophagy, Necroptosis
In vitro	Glyphosate exposure interferes with mouse oocyte maturation by generating oxidative stress and early apoptosis. Glyphosate induces early apoptosis and autophagy in mouse oocytes[3].

Solubility Information

Solubility	H ₂ O: 10 mg/mL (59.15 mM), Sonication is recommended. DMSO: < 1 mg/mL (insoluble or slightly soluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.9147 mL	29.5735 mL	59.1471 mL
5 mM	1.1829 mL	5.9147 mL	11.8294 mL
10 mM	0.5915 mL	2.9574 mL	5.9147 mL
50 mM	0.1183 mL	0.5915 mL	1.1829 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

Greim H, Saltmiras D, Mostert V, Strupp C. Evaluation of carcinogenic potential of the herbicide glyphosate, drawing on tumor incidence data from fourteen chronic/carcinogenicity rodent studies. *Crit Rev Toxicol.* 2015 Mar; 45(3):185-208.

Carneiro RT, Taketa TB, et al. Removal of glyphosate herbicide from water using biopolymer membranes. *J Environ Manage.* 2015 Mar 15;151:353-60.

Wiersma AT, Gaines TA, Preston C, Hamilton JP, Giacomini D, Robin Buell C, Leach JE, Westra P. Gene amplification of 5-enol-pyruvylshikimate-3-phosphate synthase in glyphosate-resistant *Kochia scoparia*. *Planta.* 2015 Feb;241(2):463-74. doi: 10.1007/s00425-014-2197-9. Epub 2014 Nov 5. PubMed PMID: 25366557.

Wiersma AT, Gaines TA, Preston C, Hamilton JP, Giacomini D, Robin Buell C, Leach JE, Westra P. Gene amplification of 5-enol-pyruvylshikimate-3-phosphate synthase in glyphosate-resistant *Kochia scoparia*. *Planta.* 2015 Feb;241(2):463-74.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481