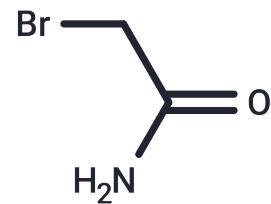


2-Bromoacetamide

Chemical Properties

CAS No. :	683-57-8
Formula:	C ₂ H ₄ BrNO
Molecular Weight:	137.96
Storage:	Store under nitrogen Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	2-Bromoacetamide (α -Bromoacetamide) is an emerging unregulated disinfection by-product showing developmental toxicity in animals. It inactivates alcohol dehydrogenase.
Targets(IC50)	Others,Dehydrogenase
In vitro	2-Bromoacetamide (0, 3.5, 3.75 and 4 mg/L) impairs mouse oocyte maturation by impeding meiosis progression. [1]

Solubility Information

Solubility	DMSO: 80 mg/mL (579.88 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: 3.3 mg/mL (23.92 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.2485 mL	36.2424 mL	72.4848 mL
5 mM	1.4497 mL	7.2485 mL	14.497 mL
10 mM	0.7248 mL	3.6242 mL	7.2485 mL
50 mM	0.145 mL	0.7248 mL	1.4497 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

- Zhang C, et al. 2-bromoacetamide exposure impairs oocyte maturation in mice and humans primarily via disrupting the cytoskeleton. *Ecotoxicol Environ Saf.* 2024 Mar 1;272:116105.
- Taylor MJ, Dervan PB. Kinetic analysis of sequence-specific alkylation of DNA by pyrimidine oligodeoxyribonucleotide-directed triple-helix formation. *Bioconjug Chem.* 1997 May-Jun;8(3):354-64.
- Zhang C, et al. Developmental toxicity of 2-bromoacetamide on peri- and early post-implantation mouse embryos in vitro. *Ecotoxicol Environ Saf.* 2023 Mar 1;252:114612.

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