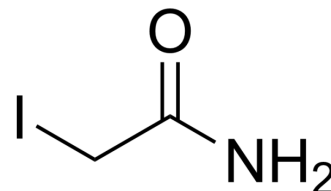


## 2-Iodoacetamide

<b>Cat. No.:</b>	HY-34477
<b>CAS No.:</b>	144-48-9
<b>Molecular Formula:</b>	C <sub>2</sub> H <sub>4</sub> INO
<b>Molecular Weight:</b>	184.96
<b>Target:</b>	DNA Alkylator/Crosslinker
<b>Pathway:</b>	Cell Cycle/DNA Damage
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (540.66 mM; Need ultrasonic)  
H<sub>2</sub>O : 100 mg/mL (540.66 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	5.4066 mL	27.0329 mL	54.0657 mL
	5 mM	1.0813 mL	5.4066 mL	10.8131 mL
	10 mM	0.5407 mL	2.7033 mL	5.4066 mL

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

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 100 mg/mL (540.66 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (13.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (13.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (13.52 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

2-Iodoacetamide (Iodoacetamide), an alkylating agent, is a commonly used agent for alkylation of cysteine during sample preparation for proteomics<sup>[1][2]</sup>.

#### In Vivo

2-Iodoacetamide (2.0-10 mg; drinking; daily; 20-93 days) feeding always produces chronic deep ulcers in the secretory part of the rat stomach<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Sprague-Dawley rats <sup>[2]</sup>
Dosage:	2.0-10 mg
Administration:	Drinking water, daily, for periods of 20 to 93 days
Result:	Produced gastritis which was further complicated by chronic ulceration in many of the test rats.

## CUSTOMER VALIDATION

- Arab J Chem. 2024 Feb, 17(2), 105550.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Peter G Hains, et al. The Impact of Commonly Used Alkylating Agents on Artifactual Peptide Modification. J Proteome Resq. 2017 Sep 1;16(9):3443-3447.
- [2]. J J LALICH. Iodoacetamide induced gastric ulcers in rats. Proc Soc Exp Biol Med. 1962 Apr;109:905-8.

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

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