Product Datasheet

Technical Data

Formula	C_2H_4INO					
Molecular Weight	184.96	**CAS No.**	144-48-9			
Solubility (25°C)*	In vitro	DMSO	40 mg/mL (216.26 mM)			
		Water	40 mg/mL (216.26 mM)			
		Ethanol	40 mg/mL (216.26 mM)			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.
		Injection	Clear solution	5%DMSO [1] → 40%PEG300 [2] → 5%Tween80 [3] → 50%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	2mg/ml (10.81mM)	Taking the 1 mL working solution as an example, add 50 μL of 40 mg/ml clarified DMSO stock solution to 400 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 500 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.
			Clear solution	5% DMSO [1] → 95% Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.29mg/ml (1.57mM)	Taking the 1 mL working solution as an example, add 50 μL of 5.8 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly. The mixed solution should be used immediately for optimal results.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / 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
50 mM	0.1081 mL	0.5407 mL	1.0813 mL

Biological Activity

Description	Iodoacetamide (IA, IAM, 2-Iodoacetamide) is an alkylating agent that is commonly used for alkylation of cysteine during sample preparation for proteomics.
In vitro	A multiple cleavage cascade mechanism is partially utilized to produce virus structural proteins. In infected cells, the largest viral induced protein obtained has a molecular weight of 144,000. Pretreatment of the infected cells with iodoacetamide before pulsing with 35S-methionine results in the appearance of two polypeptides of molecular weights 205,000 and 190,000. Other changes occur in viral protein precursors in the presence of this compound.[2]
In vivo	Iodoacetamide induces a concentration-dependent weight loss and reduces water intake in both species (Wistar rats and CD1, C57Bl/6J mice). This compound induces gastritis in rats.[3]

Protocol (from reference)

Cell Assay:[2]

- **Cell lines**
  Drosophila melanogaster cells
- **Concentrations**
  2 mM
- **Incubation Time**
  15 mins
- **Method**
  Infected cells pretreated with 2 mM iodoaeetamide for 15 minutes before pulsing with 500 μCi of 35S-methionine for 30 minutes. The molecular weights are calculated by direct comparison of the stained dried slab gel and the corresponding autoradiogram.

Animal Study:[3]

- **Animal Models**
  Wistar rats, 8-week-old male CD1 and C57Bl/6J mice
- **Dosages**
  0.05%, 0.1%, 0.2%, 0.3% and 0.5% concentration
- **Administration**
  Oral gavage

References

https://pubmed.ncbi.nlm.nih.gov/28799334/ https://pubmed.ncbi.nlm.nih.gov/6788024/ https://pubmed.ncbi.nlm.nih.gov/32764237/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

EU Headquarters
Gajeva ulica 28, HR-10000 Zagreb, Croatia

US Headquarters
12222 Merit Dr STE 130 Dallas, Texas, 75251

UK Headquarters
121 ABILITY HOUSE, BROOKER ROAD, EN9 1JH, ESSEX

Orders: Sales@capsidbio.com
Enquiries: info@capsidbio.com
www.capsidbio.com