

Sodium Iodoacetate

Chemical Properties

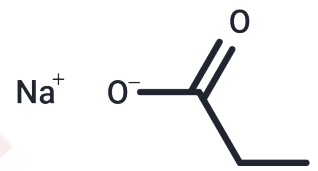
CAS No. : 305-53-3

Formula: C₂H₂INaO₂

Molecular Weight: 207.93

Storage: Store at low temperature, Store under nitrogen
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	Sodium Iodoacetate is a specific and irreversible inhibitor of GAPDH that suppresses glycolysis. It is commonly employed to establish osteoarthritis models.
Targets(IC ₅₀)	Others, Dehydrogenase, Immunology/Inflammation related
In vivo	A single injection of Sodium Iodoacetate (0, 0.3, and 3 mg/joint) into the right knee joint space induced synovial cell proliferation and moderate fibrotic changes in Wistar rats, accompanied by mild inflammatory cell infiltration [3].

Solubility Information

Solubility	DMSO: 80 mg/mL (384.74 mM), Sonication is recommended. H ₂ O: ≥ 80 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.8093 mL	24.0466 mL	48.0931 mL
5 mM	0.9619 mL	4.8093 mL	9.6186 mL
10 mM	0.4809 mL	2.4047 mL	4.8093 mL
50 mM	0.0962 mL	0.4809 mL	0.9619 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

- Xu Y, et al. Glycolysis in Innate Immune Cells Contributes to Autoimmunity. *Front Immunol.* 2022 Jul 1;13:920029.
- Na HS, et al. Soluble CCR2 gene therapy controls joint inflammation, cartilage damage, and the progression of osteoarthritis by targeting MCP-1 in a monosodium iodoacetate (MIA)-induced OA rat model. *J Transl Med.* 2022 Sep 23;20(1):428.
- Kobayashi K, et al. Sodium iodoacetate-induced experimental osteoarthritis and associated pain model in rats[J]. *Journal of Veterinary Medical Science*, 2003, 65(11): 1195-1199.
- Güler N, et al. Sodium iodoacetate induced osteoarthrosis model in rabbit temporomandibular joint: CT and histological study (part I)[J]. *International journal of oral and maxillofacial surgery*, 2011, 40(11): 1289-1295.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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