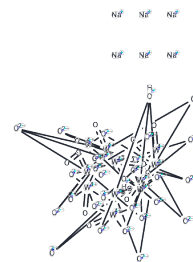


Sodium metatungstate

Chemical Properties

CAS No. :	12141-67-2
Formula:	H ₂ Na ₆ O ₄₀ W ₁₂
Molecular Weight:	2985.99
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	Sodium metatungstate (Sodium polyoxotungstate) is a potent inhibitor of ecto-nucleoside triphosphate diphosphohydrolase (NTPDase), with Ki values of 2.58 μM for NTPDase 1, 3.26 μM for NTPDase 3, and 28.8 μM for NTPDase 2.
Targets(IC50)	Pyroptosis, Interleukin, P2X Receptor, P2Y Receptor, Phosphatase

Solubility Information

Solubility	DMSO: 250 mg/mL (83.72 mM), Sonication is recommended. H ₂ O: 48 mg/mL (16.08 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: 2 mg/mL (0.67 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	0.3349 mL	1.6745 mL	3.349 mL
5 mM	0.067 mL	0.3349 mL	0.6698 mL
10 mM	0.0335 mL	0.1674 mL	0.3349 mL
50 mM	0.0067 mL	0.0335 mL	0.067 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

Müller CE, et al. Polyoxometalates--a new class of potent ecto-nucleoside triphosphate diphosphohydrolase (NTPDase) inhibitors. *Bioorg Med Chem Lett*. 2006 Dec 1;16(23):5943-7.

Luo C, Liu X, Liu Y, et al. Upregulation of CD39 During Gout Attacks Promotes Spontaneous Remission of Acute Gouty Inflammation. *Inflammation*. 2023: 1-14.

Wall et al. The novel NTPDase inhibitor sodium polyoxotungstate (POM-1) inhibits ATP breakdown but also blocks central synaptic transmission, an action independent of NTPDase inhibition. *Neuropharmacology*. 2008 Dec;55(7): 1251-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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