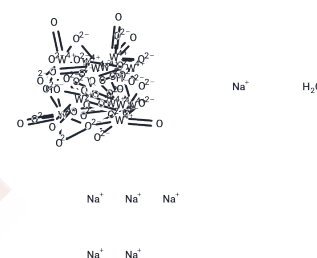


Sodium metatungstate hydrate

Chemical Properties

CAS No. : 314075-43-9
 Formula: $H_4Na_6O_{41}W_{12}$
 Molecular Weight: 3004.01
 Storage: Powder: $-20^{\circ}C$ for 3 years | In solvent: $-80^{\circ}C$ for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	Sodium metatungstate (Sodium polyoxotungstate; POM-1) hydrate is an inhibitor of NTPDase, with K_i values for NTPDase1 (CD39), NTPDase 3, and NTPDase 2 being $2.58 \mu M$, $3.26 \mu M$, and $28.8 \mu M$, respectively. It exhibits anti-inflammatory and anticancer properties and inhibits ATP hydrolysis while also blocking central synaptic transmission.
Targets(IC50)	Pyroptosis, Phosphatase
In vitro	Sodium metatungstate hydrate ($100 \mu M$, 15 min) inhibits ATP-induced anionic dye uptake and large pore formation in macrophages. Additionally, Sodium metatungstate hydrate ($100 \mu M$, 8 h) suppresses ATP-induced P2X7-related pyroptosis in macrophages. Furthermore, Sodium metatungstate hydrate ($100 \mu M$, 8-24 h) exhibits significant anti-inflammatory effects on macrophages.
In vivo	Sodium metatungstate hydrate (5 mg/kg, intraperitoneal injection, single dose) exhibits distinct cytokine/chemokine responses in the peritoneum and systemic circulation of CD39 knockout mice. Furthermore, when combined with anti-CD73 antibody and AZD4635, sodium metatungstate hydrate (5 mg/kg, intraperitoneal injection, once daily, from day 0 to day 4, day 7 to day 11, and day 14 to day 18) effectively reduces tumor burden in mice with multiple myeloma (MM).

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.3329 mL	1.6644 mL	3.3289 mL
5 mM	0.0666 mL	0.3329 mL	0.6658 mL
10 mM	0.0333 mL	0.1664 mL	0.3329 mL
50 mM	0.0067 mL	0.0333 mL	0.0666 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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