

Abrucomstat

Chemical Properties

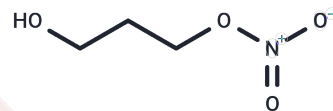
CAS No. : 100502-66-7

Formula: C₃H₇NO₄

Molecular Weight: 121.09

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Abrucomstat (3-NOP) (3-Nitroxypropanol) functions as an enzyme inhibitor, effectively reducing ruminal methanogenesis.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 245 mg/mL (2023.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (82.58 mM),Solution. <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	8.2583 mL	41.2916 mL	82.5832 mL
5 mM	1.6517 mL	8.2583 mL	16.5166 mL
10 mM	0.8258 mL	4.1292 mL	8.2583 mL
50 mM	0.1652 mL	0.8258 mL	1.6517 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

Zhang XM, et al. 3-Nitrooxypropanol supplementation had little effect on fiber degradation and microbial colonization of forage particles when evaluated using the in situ ruminal incubation technique. J Dairy Sci. 2020 Oct;103(10):8986-8997.

Meale SJ, et al. Early life dietary intervention in dairy calves results in a long-term reduction in methane emissions. Sci Rep. 2021 Feb 4;11(1):3003.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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