Inhibitors

N-methyl-N-dithiocarboxyglucamine sodium

Cat. No.: HY-111054A CAS No.: 91840-27-6 Molecular Formula: C₈H₁₆NNaO₅S₂

293.34 Molecular Weight:

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease

Storage: Powder

2 years

3 years

-80°C In solvent 6 months

-20°C

-20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 62.5 mg/mL (213.06 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.4090 mL	17.0451 mL	34.0901 mL
	5 mM	0.6818 mL	3.4090 mL	6.8180 mL
	10 mM	0.3409 mL	1.7045 mL	3.4090 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description N-methyl-N-dithiocarboxyglucamine (MDCG) sodium mobilizes and promotes excretion of metallothionein-bound ¹⁰⁹Cd in

mouse model. N-methyl-N-dithiocarboxyglucamine significantly lowers the Cd content of both the liver and kidney, which is

organs most susceptible to Cd-induced toxicity [1].

In Vivo N-methyl-N-dithiocarboxyglucamine (1.1 mM/kg; ip; single dose) could significantly induce the excretion of Cd from feces.

Increasing the number of treatments to 7 times per week, N-methyl-N-dithiocarboxyglucamine results in a more than 50%

reduction in systemic Cd load in mice^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Gale GR, et al. Effects of sodium N-methyl-N-dithiocarboxyglucamine on cadmium distribution and excretion. Life Sci. 1984 Dec 17;35(25):2571-8.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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