

Sodium thiocyanate, GR, 99%

Cat. No.:	HY-23119
CAS No.:	540-72-7
Molecular Formula:	CNNaS
Molecular Weight:	81.07
Target:	Interleukin Related; Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

NaSCN

SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (616.75 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		12.3350 mL	61.6751 mL	123.3502 mL
		5 mM		2.4670 mL	12.3350 mL	24.6700 mL
10 mM		1.2335 mL	6.1675 mL	12.3350 mL		
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (30.84 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (30.84 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (30.84 mM); Clear solution 					

BIOLOGICAL ACTIVITY

Description	Sodium thiocyanate reduces plasma levels of the pro-inflammatory cytokine IL-6, and increases the anti-inflammatory cytokine IL-10 levels. Sodium thiocyanate also significantly reduces of ROS formation ^[1] .	
IC₅₀ & Target	IL-6	IL-10
In Vitro	Sodium thiocyanate attenuates atherosclerotic plaque formation and improves endothelial regeneration in mice. Sodium thiocyanate improves inflammatory cytokine levels in the plasma as well as ROS and chlorotyrosine formation in the vessel wall ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Zietzer A, et al. Sodium thiocyanate treatment attenuates atherosclerotic plaque formation and improves endothelial regeneration in mice. PLoS One. 2019 Apr 2;14(4):e0214476.

Caution: Product has not been fully validated for medical applications. For research use only.

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