# **Product** Data Sheet

## **Thiocysteine**

Cat. No.: HY-115890 CAS No.: 6165-31-7 Molecular Formula:  $C_3H_7NO_2S_2$ Molecular Weight: 153.22

Target: Reactive Oxygen Species

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κΒ

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

$$HS_S \longrightarrow OH$$
 OH

#### **BIOLOGICAL ACTIVITY**

Description	•	Thiocystine is the trisulfide analog of cysteine, it can modify cysteine in proteins. Thiocystine is an activator for aminolevulinate synthetase. Thiocystine can be used for cysteine metabolism research <sup>[1][2]</sup> .	
In Vitro	Thiocysteine directly interacts with reactive oxygen species $[2]$ .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	Thiocystine (120 mg/kg; i.v., once) shows protective properties against toxicity of cyanide <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
	Animal Model:	Adult male and female rats with cyanide injection $^{\left[ 1 ight] }$	
	Dosage:	120 mg/kg	
	Administration:	Intravenous injection; 120 mg/kg, once	
	Result:	Showed completely protective effects to testing animals.	

### **REFERENCES**

[1]. Wood JL. Nutritional and protective properties of thiocystine. Proc Soc Exp Biol Med. 1980 Dec;165(3):469-72.

[2]. Reitzer L. Death by Cystine: an Adverse Emergent Property from a Beneficial Series of Reactions. J Bacteriol. 2015 Dec;197(23):3626-8.

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

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