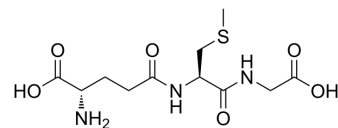


## S-Methylglutathione

Cat. No.:	HY-W009177
CAS No.:	2922-56-7
Molecular Formula:	C <sub>11</sub> H <sub>19</sub> N <sub>3</sub> O <sub>6</sub> S
Molecular Weight:	321.35
Target:	Glyoxalase (GLO)
Pathway:	Metabolic Enzyme/Protease
Storage:	Sealed storage, away from moisture
	Powder    -80°C    2 years
	-20°C    1 year



\* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 25 mg/mL (77.80 mM; ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.1119 mL	15.5594 mL	31.1187 mL
	5 mM	0.6224 mL	3.1119 mL	6.2237 mL
	10 mM	0.3112 mL	1.5559 mL	3.1119 mL

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

### BIOLOGICAL ACTIVITY

#### Description

S-Methylglutathione is an S-substituted glutathione and a stronger nucleophile than GSH<sup>[1]</sup>. S-Methylglutathione has inhibitory effect on glyoxalase 1<sup>[2]</sup>.

#### In Vitro

S-Methylglutathione (GS-Me) is a stronger nucleophile than GSH, which is rationalized by the more positive inductive effect of the methyl group<sup>[1]</sup>.

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

### REFERENCES

[1]. Foye WO, et al. Synthesis and evaluation of N-alkanoyl-S-benzyl-L-cysteinylglutamic acid esters as glyoxalase I inhibitors and anticancer agents. J Pharm Sci. 1984 Apr;73(4):559-61.

[2]. Milos I. Djuran, et al. Reactivity of chloro- and aqua(diethylenetriamine)platinum(II) ions with glutathione, S-methylglutathione, and guanosine 5'-monophosphate in relation to the antitumor activity and toxicity of platinum complexes. Inorg. Chem. 1991, 30, 12, 2648-2652

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

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