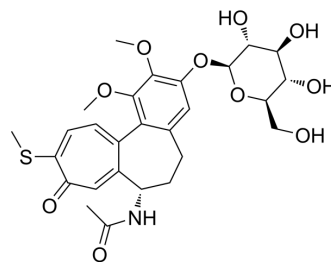


## Thiocolchicoside

<b>Cat. No.:</b>	HY-N0301		
<b>CAS No.:</b>	602-41-5		
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>33</sub> NO <sub>10</sub> S		
<b>Molecular Weight:</b>	563.62		
<b>Target:</b>	GABA Receptor		
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 233.33 mg/mL (413.98 mM; Need ultrasonic)  
 H<sub>2</sub>O : 50 mg/mL (88.71 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		1.7742 mL	8.8712 mL	17.7425 mL
	5 mM		0.3548 mL	1.7742 mL	3.5485 mL
	10 mM		0.1774 mL	0.8871 mL	1.7742 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.08 mg/mL (3.69 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.08 mg/mL (3.69 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Thiocolchicoside is a competitive γ-aminobutyric acid type A (GABA<sub>A</sub>) receptor antagonist and glycine receptor agonist in the central nervous system. Thiocolchicoside is a semisynthetic sulfur derivative of colchicoside. Thiocolchicoside is a muscle relaxant and has anti-inflammatory, and analgesic properties<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

GABA<sub>A</sub> receptor; glycine receptor<sup>[1]</sup>

#### In Vitro

Thiocolchicoside (0.001, 0.1, 1, 10, 100 μM) reduces the amplitude of eIPSCs in a concentration-dependent manner with this effect being significant at 0.1 μM and maximal at 10 μM<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Carta M, et al. The muscle relaxant thicolchicoside is an antagonist of GABA<sub>A</sub> receptor function in the central nervous system. *Neuropharmacology*. 2006 Sep;51(4):805-15.

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

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