# **PRODUCT** INFORMATION



Thiomuscimol

Item No. 18857

CAS Registry No.:	62020-54-6	
Formal Name:	5-(aminomethyl)-3(2H)-isothiazolone	H
MF:	$C_4 H_6 N_2 OS$	 .N.
FW:	130.2	0 s
Purity:	≥95%	$\setminus$ /
UV/Vis.:	λ <sub>max</sub> : 262 nm	<u> </u>
Supplied as:	A crystalline solid	NH <sub>2</sub>
Storage:	-20°C	
Stability:	≥4 years	
Information represents	the product specifications. Batch specific analytical results are	provided on each certificate of analysis.

# Laboratory Procedures

Thiomuscimol is supplied as a crystalline solid. Aqueous solutions of thiomuscimol can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of thiomuscimol in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

# Description

Thiomuscimol is a GABA<sub>A</sub> receptor agonist ( $IC_{50}$  = 19 nM).<sup>1,2</sup> It has been used as a photoaffinity label for the purification and identification of GABA binding sites within the GABA<sub>A</sub> receptor complex.<sup>3</sup>

# References

- 1. Melikian, A., Schlewer, G., Chambon, J.-P., et al. Condensation of muscimol or thiomuscimol with aminopyridazines yields GABA-<sub>A</sub> antagonists. J. Med. Chem. **35(22)**, 4092-4097 (1992).
- 2. Krogsgaard-Larsen, P., Hjeds, H., Curtis, D.R., et al. Dihydromuscimol, thiomuscimol and related heterocyclic compounds as GABA analogues. J. Neurochem. 32(6), 1717-1724 (1979).
- Nielsen, M., Witt, M.-R., Ebert, B., et al. Thiomuscimol, a new photoaffinity label for the GABA receptor. 3. Eur. J. Pharmacol. 289(1), 109-112 (1995).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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