

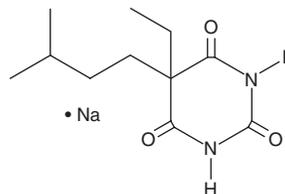
PRODUCT INFORMATION



Amobarbital (sodium salt)

Item No. 15882

CAS Registry No.: 64-43-7
Formal Name: 5-ethyl-5-(3-methylbutyl)-2,4,6(1H,3H,5H)-pyrimidinetrione, monosodium salt
Synonyms: 5-Ethyl-5-isopentylbarbituric Acid, NSC 10815, NSC 32406, NSC 120800
MF: C₁₁H₁₇N₂O₃ • Na
FW: 248.3
Purity: ≥95%
UV/Vis.: λ_{max}: 240 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Amobarbital (sodium salt) (Item No. 15882) is an analytical reference standard that is categorized as a barbiturate. By activating GABA_A receptors in rat thalamic slices, 100 μM amobarbital elicits a depressant effect, increasing both the amplitude and decay time of inhibitory postsynaptic currents.¹ It has also been shown to compete with rotenone (Item No. 13995) for binding at complex I to inhibit mitochondrial electron transport.² Amobarbital is regulated as a schedule II compound in the United States and intended only for forensic and research purposes.

References

1. Kim, H.-S., Wan, X., Mathers, D.A., *et al.* Selective GABA-receptor actions of amobarbital on thalamic neurons. *Br. J. Pharmacol.* **143**(4), 485-494 (2004).
2. Chen, A., Hoppel, C.L., and Lesnefsky, E.J. Blockade of electron transport before cardiac ischemia with the reversible inhibitor amobarbital protects rat heart mitochondria. *J. Pharmacol. Exp. Ther.* **316**(1), 200-207 (2006).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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