

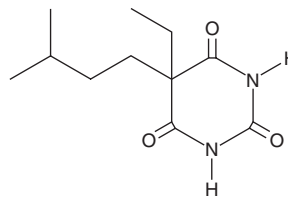
PRODUCT INFORMATION



Amobarbital

Item No. 17784

CAS Registry No.: 57-43-2
Formal Name: 5-ethyl-5-(3-methylbutyl)-2,4,6(1H,3H,5H)-pyrimidinetrione
Synonyms: 5-Ethyl-5-isopentylbarbituric acid, NSC 10815, NSC 32406, NSC 120800
MF: C₁₁H₁₈N₂O₃
FW: 226.3
Purity: ≥98%
Supplied as: A neat solid
Storage: -20°C
Stability: ≥1 year



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

Description

Amobarbital (Item No. 17784) is an analytical reference material 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.

o This product is qualified as a Reference Material that has been manufactured and tested to ISO/IEC 17025 and ISO 17034 international standards.

References

1. Kim, H.-S., Wan, X., Mathers, D.A., *et al.* Selective GABA-receptor actions of amobarbital on thalamic neurons. *Br. J. Pharmac.* **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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