PRODUCT INFORMATION



Nirvanol

Item No. 21733

CAS Registry No.: 631-07-2

5-ethyl-5-phenyl-2,4-imidazolidinedione Formal Name: Synonyms: rac-N-Desmethyl Mephenytoin, NSC 150466,

NSC 33388, Phenylethylhydantoin

MF: $C_{11}H_{12}N_2O_2$ 204.2 FW: **Purity:**

Supplied as: A solid Storage: -20°C Stability: ≥4 vears

≥98%

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

Laboratory Procedures

Nirvanol is supplied as a solid. A stock solution may be made by dissolving the nirvanol in the solvent of choice, which should be purged with an inert gas. Nirvanol is soluble in DMSO.

Description

Nirvanol is an active metabolite of mephenytoin, a substrate of the cytochrome P450 (CYP) isoform CYP2C19 with anticonvulsant activities. It blocks the hind leg tonic extensor phase in a mouse model of seizures induced by maximal electroshock (MES; ED₅₀ = 30 mg/kg).

Reference

1. Kupferberg, H.J. and Yonekawa, W. The metabolism of 3-methyl-5-ethyl-5-phenylhydantoin (mephenytoin) to 5-ethyl-5-phenylhydantoin (nirvanol) in mice in relation to anticonvulsant activity. Drug Metab. Dispos. 3(1), 26-29 (1975).

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

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.

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.

Copyright Cayman Chemical Company, 11/11/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM