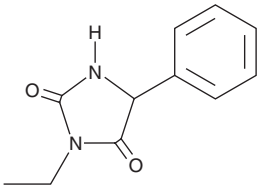
PRODUCT INFORMATION

Ethotoin

Item No. 24022

CAS Registry No.: 86-35-1
Formal Name: 3-ethyl-5-phenyl-2,4-imidazolidinedione
Synonym: (±)-Ethotoin
MF: $C_{11}H_{12}N_2O_2$
FW: 204.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

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

Description

Ethotoin is a hydantoin anticonvulsant.[1,2] It shortens the duration of the tonic extensor aspect of seizures induced by maximal electroshock in rats when administered at doses ranging from 500-1,000 mg/kg.[2] It also decreases the duration of the tonic phase of seizures at a dose of 1,000 mg/kg but does not affect the duration of the clonic phase at any dose.[2] Ethotoin (20 mg/kg, i.p.) decreases serum cholesterol and triglyceride concentrations in mice to 67 and 60%, respectively, of control after 16 days of treatment.[3] Formulations containing ethotoin have been used in the treatment of tonic-clonic and complex partial seizures.

References

1. Livingston, S. The use of peganone (AC 695) in the treatment of epilepsy. *J. Pediatr.* **49(6)**, 728-732 (1956).
2. Kamei, C., Masuda, Y., Oka, M., *et al*. Effects of antiepileptics on both behavioral and electrographic seizure patterns induced by maximal electroshock in rats. *Epilepsia* **19(6)**, 625-636 (1978).
3. Maguire, J.H., Murthy, A.R., and Hall, I.H. Hypolipidemic activity of antiepileptic 5-phenylhydantoins in mice. *Eur. J. Pharmacol.* **117(1)**, 135-138 (1985).

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