

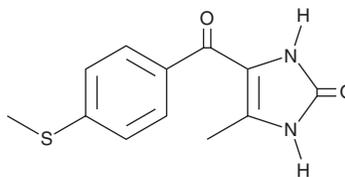
PRODUCT INFORMATION



Enoximone

Item No. 30868

CAS Registry No.: 77671-31-9
Formal Name: 1,3-dihydro-4-methyl-5-[4-(methylthio)benzoyl]-2H-imidazol-2-one
Synonym: MDL 17043
MF: C₁₂H₁₂N₂O₂S
FW: 248.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Enoximone is supplied as a solid. A stock solution may be made by dissolving the enoximone in the solvent of choice, which should be purged with an inert gas. Enoximone is soluble in the organic solvent DMSO at a concentration of approximately 100 mM.

Description

Enoximone is a phosphodiesterase 3 (PDE3) inhibitor (IC₅₀ = 5.9 μM).¹ It is selective for PDE3 over PDE1, -2, and -4 (IC₅₀s = 2,100, 2,900, and 21.1 μM, respectively). Enoximone increases the force of contraction and cAMP levels in isolated canine right ventricular trabeculae, an effect that can be reversed by carbamoylcholine (carbachol; Item No. 14486).² *In vivo*, enoximone (0.1-1 mg/kg) increases cardiac contractile force in dogs.³ Formulations containing enoximone have been used in the treatment of congestive heart failure.

References

1. Bethke, T., Eschenhagen, T., Klimkiewicz, A., *et al.* Phosphodiesterase inhibition by enoximone in preparations from nonfailing and failing human hearts. *Arzneimittelforschung* **42(4)**, 437-445 (1992).
2. Endoh, M., Yanagisawa, T., Morita, T., *et al.* Differential effects of sulmazole (AR-L 115 BS) on contractile force and cyclic AMP levels in canine ventricular muscle: Comparison with MDL 17,043. *J. Pharmacol. Exp. Ther.* **234(1)**, 267-273 (1985).
3. Dage, R.C., Roebel, L.E., Hsieh, C.P., *et al.* Cardiovascular properties of a new cardiotonic agent: MDL 17,043 (1,3-dihydro-4-methyl-5-[4-(methylthio)benzoyl]-2H-imidazol-2-one) *J. Cardiovasc. Pharmacol.* **4(3)**, 500-508 (1982).

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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