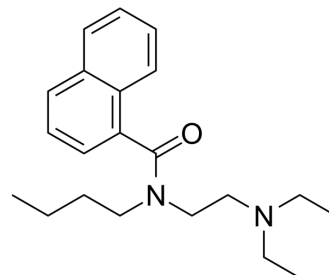


Bunaftide

Cat. No.:	HY-U00113
CAS No.:	32421-46-8
Molecular Formula:	C ₂₁ H ₃₀ N ₂ O
Molecular Weight:	326.48
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Bunaftide (Bunaftine; Bunaphtide; Meregon) is an antiarrhythmic agent.
In Vitro	<p>At concentrations of 0.5-2.0 mM, Bunaftide causes contraction and rounding of the cells with loss of microvilli-like processes. Aggregates of dense, partly granular, partly fibrillar material form in the cytoplasm and the rough endoplasmic reticulum became vesiculated. Bundles of actin filaments are disrupted, forming rings, coils, and granules. 0.4 mM Bunaftide increases and 0.8-1.0 mM markedly decreases the percentage of mitotic cells, without accumulation of cells in any particular stage of mitosis. The drug may arrest the cell cycle at some point before mitosis; it may have a critical concentration above which the arrest becomes permanent^[1]. Bunaftide at 1, 5 and 10 mg/L produces a concentration-dependent depression of the maximum rate of rise of the action potential in guinea pig papillary muscle preparations without affecting the resting membrane potential and the action potential amplitude. The action potential duration (APD50, APD90) is significantly prolonged by the treatment with 1 and 5 mg/L Bunaftide, while it is not changed by the treatment with 10 mg/L^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

PROTOCOL

Cell Assay ^[1]	<p>Human embryonic fibroblasts and HeLa cells are seeded into 35-mm plastic Petri dishes at a density of 1x10⁵ cells/cm². Bunaftide is used in final concentrations of 0.1-2.0 mM. The cells are exposed to the drug for periods ranging from 15 min to 24 h. To allow the cells to recover, the Bunaftide medium is removed and the cultures are left in standard medium for 4-24 h^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
---------------------------	---

REFERENCES

- [1]. Moskalewski S, et al. Effects of bunaftine on morphology, microfilament integrity, and mitotic activity in cultured human fibroblasts and HeLa cells. *Cell Tissue Res.* 1984;236(1):107-15.
- [2]. Kimura T, et al. Electrophysiological effects of bunaftine, an antiarrhythmic drug, on action potential characteristics in ventricular muscle preparations. *Nihon Yakurigaku Zasshi.* 1986 Jul;88(1):1-7.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA