PRODUCT INFORMATION



Dofequidar

Item No. 30925

CAS Registry No.: 129716-58-1

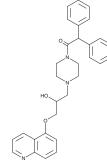
Formal Name: 1-[4-[2-hydroxy-3-(5-quinolinyloxy)propyl]-

1-piperazinyl]-2,2-diphenyl-ethanone

MF: $C_{30}H_{31}N_3O_3$

FW: 481.6 **Purity:** ≥98% 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

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

Description

Dofequidar is a quinoline derivative and inhibitor of multidrug resistance.^{1,2} It inhibits P-glycoprotein in a photolabeling assay when used at a concentration of $100 \mu M$. Dofequidar (10 μM) increases intracellular accumulation of [3H]-vincristine in HL-60R cells endogenously expressing the gene encoding multidrug resistance-associated protein (MRP).² It restores susceptibility to vincristine- or doxorubicin-induced cytotoxicity in vincristine-resistant P388, vincristine-resistant K562, and doxorubicin-resistant K562 cells in a concentration-dependent manner. Dofequidar (80 mg/kg twice per day) increases survival in a vincristine-resistant P388 murine leukemia model compared with untreated controls when administered in combination with vincristine (Item No. 11764).

References

- 1. Sato, W., Fukazawa, N., Nakanishi, O., et al. Reversal of multidrug resistance by a novel quinoline derivative, MS-209. Cancer Chemother. Pharmacol. 35(4), 271-277 (1995).
- 2. Narasaki, F., Oka, M., Fukuda, M., et al. A novel quinoline derivative, MS-209, overcomes drug resistance of human lung cancer cells expressing the multidrug resistance-associated protein (MRP) gene. Cancer Chemother. Pharmacol. 40(5), 425-432 (1997).

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.

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