Product Data Sheet

Product Name: Dofequidar
Cat. No.: GC35892

Chemical Properties

Cas. No.	129716-58-1		
SMILES	OC(COC1=C2C=CC=NC2=CC=C1)CN3CCN(C(C(C4=CC=CC=C4)C5=CC=CC=C5)=O)CC3		
Formula	$C_{30}H_{31}N_3O_3$	M.Wt	481.59
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Dofequidar		

Background

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 µM.[1] Dofequidar (10 µM) increases intracellular accumulation of [^{3}H]-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.[1] 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 .

1.Sato, W., Fukazawa, N., Nakanishi, O., et al.Reversal of multidrug resistance by a novel quinoline derivative, MS-209Cancer 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) geneCancer Chemother. Pharmacol.40(5)425-432(1997)

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