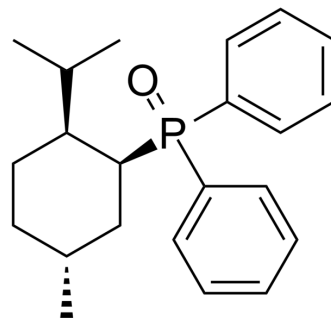


DPO-1

Cat. No.:	HY-100712		
CAS No.:	43077-30-1		
Molecular Formula:	C ₂₂ H ₂₉ OP		
Molecular Weight:	340.44		
Target:	Potassium Channel		
Pathway:	Membrane Transporter/Ion Channel		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (29.37 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.9374 mL	14.6869 mL	29.3738 mL
5 mM	0.5875 mL	2.9374 mL	5.8748 mL
10 mM	0.2937 mL	1.4687 mL	2.9374 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

DPO-1 is a potent inhibitor of the voltage-gated potassium channel subtype K_v1.5 and a blocker of ultrarapid delayed rectifier potassium current. DPO-1 prevents atrial arrhythmia^{[1][2]}.

REFERENCES

[1]. Lagrutta A, et al. Novel, potent inhibitors of human Kv1.5 K⁺ channels and ultrarapidly activating delayed rectifier potassium current. *J Pharmacol Exp Ther.* 2006 Jun;317(3):1054-63.

[2]. Stump GL, et al. In vivo antiarrhythmic and cardiac electrophysiologic effects of a novel diphenylphosphine oxide IK_{ur} blocker (2-isopropyl-5-methylcyclohexyl) diphenylphosphine oxide. *J Pharmacol Exp Ther.* 2005 Dec;315(3):1362-7.

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

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