Halopemide

Cat. No.: HY-119093

CAS No.: 59831-65-1

Molecular Formula: $C_{21}H_{22}ClFN_4O_2$

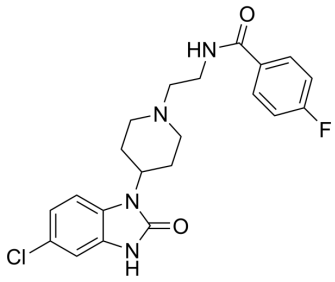
Molecular Weight: 416.88

Target: Phospholipase; Dopamine Receptor

Pathway: Metabolic Enzyme/Protease; GPCR/G Protein; Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 41.67 mg/mL (99.96 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3988 mL	11.9939 mL	23.9877 mL
	5 mM	0.4798 mL	2.3988 mL	4.7975 mL
	10 mM	0.2399 mL	1.1994 mL	2.3988 mL

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

BIOLOGICAL ACTIVITY

Description

Halopemide is a potent phospholipase D (PLD) inhibitor, with IC_{50}s of 220 and 310 nM for human PLD1 and PLD2, respectively. Halopemid is a dopamine receptors antagonist, and acts a psychotropic agent[1][2].

IC_{50} & Target	D_1 Receptor	D_2 Receptor	PLD1	PLD2
			220 nM (IC_{50})	310 nM (IC_{50})

In Vitro

Halopemide (1-2 μM; 21 day) affects calcification in transdifferentiated MOVAS cells[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Halopemide (10 mg/kg; p.o.) induces dyskinesias in the majority of monkeys tested[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Scott SA, et al. Design of isoform-selective phospholipase D inhibitors that modulate cancer cell invasiveness. Nat Chem Biol. 2009 Feb;5(2):108-17.

[2]. Neale R, et al. Acute dyskinesias in monkeys elicited by halopemide, mezilamine and the "antidyskinetic" drugs, oxiperomide and tiapride. Psychopharmacology (Berl). 1981;75(3):254-7.

[3]. Skafi N, et al. Phospholipase D: A new mediator during high phosphate-induced vascular calcification associated with chronic kidney disease. J Cell Physiol. 2019 Apr;234(4):4825-4839.

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