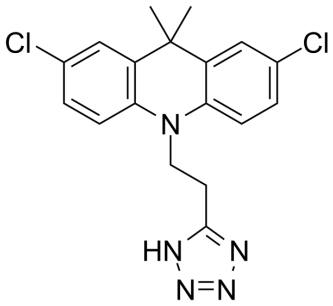
ML67-33

Cat. No.:	HY-120348
CAS No.:	1443290-89-8
Molecular Formula:	$C_{18}H_{17}Cl_2N_5$
Molecular Weight:	374.27
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 : 100 mg/mL (267.19 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6719 mL	13.3593 mL	26.7187 mL
	5 mM	0.5344 mL	2.6719 mL	5.3437 mL
	10 mM	0.2672 mL	1.3359 mL	2.6719 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1.25 mg/mL (3.34 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

ML67-33 is a selective activator of temperature- and mechano-sensitive K_{2P} channels. ML67-33 rapidly and reversibly affects K_{2P}2.1 (TREK-1) with EC_{50}s of 36.3 μM and 9.7 μM in cell-free and HEK293 cells, respectively[1].

IC_{50} & Target

EC50: 36.3 μM (K_{2P}2.1 (TREK-1)), 9.7 μM (K_{2P}2.1 (TREK-1), in HEK293 cells)[1].

In Vitro

ML67-33 activates K2P channels and mutants with EC_{50}s of 21.8±1.3 μM, 49.4±1.1 μM, 30.2±1.4 μM, and 27.3±1.2 μM for K_{2P} 2.1 (TREK-1) W275S, K_{2P}2.1 (TREK-1)-3G, K_{2P}10.1 (TREK-2), K_{2P}4.1 (TRAAK), respectively[1].

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

REFERENCES

[1]. Bagriantsev SN, et al. A high-throughput functional screen identifies small molecule regulators of temperature- and mechano-sensitive K_{2P} channels. ACS Chem Biol. 2013 Aug 16;8(8):1841-51.

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