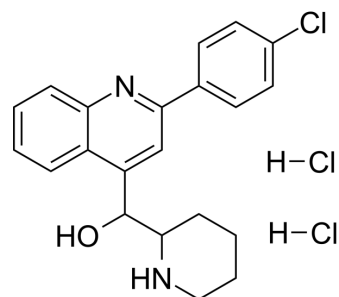


Vacquinol-1 dihydrochloride

Cat. No.:	HY-19345A
CAS No.:	2309312-85-2
Molecular Formula:	C ₂₁ H ₂₃ Cl ₃ N ₂ O
Molecular Weight:	425.78
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (58.72 mM; Need ultrasonic and warming)
H₂O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3486 mL	11.7432 mL	23.4863 mL
	5 mM	0.4697 mL	2.3486 mL	4.6973 mL
	10 mM	0.2349 mL	1.1743 mL	2.3486 mL

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

In Vivo

1. Add each solvent one by one: 50% PEG300 >> 50% saline
Solubility: 10 mg/mL (23.49 mM); Clear solution; Need ultrasonic and warming and heat to 44°C

BIOLOGICAL ACTIVITY

Description

Vacquinol-1 (NSC13316) dihydrochloride is a MKK4-specific activator that activates MAPK pathways^[1]. Vacquinol-1 dihydrochloride specifically induces human glioblastoma cell (GC) death, attenuates tumor progression and prolongs survival in a glioblastoma multiforme (GBM) mouse model^[2]. Vacquinol-1 dihydrochloride also induces apoptosis in hepatocellular carcinoma (HCC) cell^[3].

REFERENCES

- [1]. Sun SL, Li X, Su N, et al. Vacquinol-1 induces apoptosis in hepatocellular carcinoma cell. Mol Med Rep. 2018;18(1):557-563.
- [2]. Sander P, Mostafa H, Soboh A, et al. Vacquinol-1 inducible cell death in glioblastoma multiforme is counter regulated by TRPM7 activity induced by exogenous ATP. Oncotarget. 2017;8(21):35124-35137.

[3]. Chao Wu, et al. Salvianolic acid B exerts anti-liver fibrosis effects via inhibition of MAPK-mediated phospho-Smad2/3 at linker regions in vivo and in vitro. Life Sci. 2019 Dec 15;239:116881.

[4]. Yufeng Shi, et al. The soft underbelly of tumor cells. Cell Res. 2014 Aug;24(8):910-1.

[5]. Shu-Lan Sun, et al. Vacquinol 1 induces apoptosis in hepatocellular carcinoma cell. Mol Med Rep. 2018 Jul;18(1):557-563.

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

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