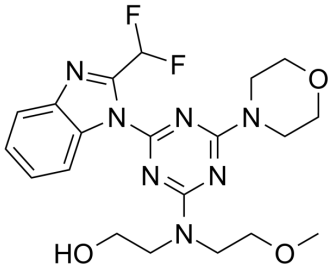
PI3K-IN-30

Cat. No.:	HY-143404
CAS No.:	2281803-22-1
Molecular Formula:	$C_{20}H_{25}F_2N_7O_3$
Molecular Weight:	449.45
Target:	PI3K
Pathway:	PI3K/Akt/mTOR
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 : 100 mg/mL (222.49 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2249 mL	11.1247 mL	22.2494 mL
	5 mM	0.4450 mL	2.2249 mL	4.4499 mL
	10 mM	0.2225 mL	1.1125 mL	2.2249 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.5 mg/mL (5.56 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (5.56 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

PI3K-IN-30 (compound 6d) is a potent PI3K inhibitor with IC_{50}s of 5.1, 136, 30.7 and 8.9 nM for PI3Kα, PI3Kβ, PI3Kγ and PI3Kδ, respectively[1].

IC_{50} & Target	PI3Kα	PI3Kβ	PI3Kγ	PI3Kδ
	5.1 nM (IC_{50})	136 nM (IC_{50})	30.7 nM (IC_{50})	8.9 nM (IC_{50})

REFERENCES

[1]. Van Dort ME, et al. Structural effects of morpholine replacement in ZSTK474 on Class I PI3K isoform inhibition: Development of novel MEK/PI3K bifunctional inhibitors. Eur J Med Chem. 2022;229:113996.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA