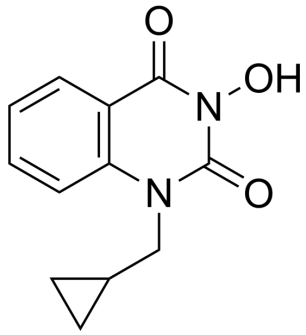
FEN1-IN-4

Cat. No.:	HY-136485
CAS No.:	1995893-58-7
Molecular Formula:	$C_{12}H_{12}N_2O_3$
Molecular Weight:	232.24
Target:	FLAP
Pathway:	Immunology/Inflammation
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (538.24 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	4.3059 mL	21.5295 mL	43.0589 mL
5 mM	0.8612 mL	4.3059 mL	8.6118 mL
10 mM	0.4306 mL	2.1529 mL	4.3059 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: ≥ 2.08 mg/mL (8.96 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (8.96 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (8.96 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

FEN1-IN-4 (Compound 2) is a human flap endonuclease-1 (hFEN1) inhibitor[1].

IC_{50} & Target

hFEN1[1]

In Vitro

FEN1 inhibition selectively impairs proliferation of colon cancer cells deficient in Cdc4 and Mre11a, both frequently mutated in colorectal cancers. FEN1 has also emerged as a potential chemosensitizing target due to its role in LP-BER since it is critical for repair of Methyl methanesulfonate-induced alkylation damage, and its knockdown or inhibition increases

sensitivity to Temozolomide in glioblastoma and colorectal cancer cell lines[1].

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

REFERENCES

[1]. Jack C Exell, et al. Cellularly Active N-hydroxyurea FEN1 Inhibitors Block Substrate Entry to the Active Site. Nat Chem Biol. 2016 Oct;12(10):815-21.

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