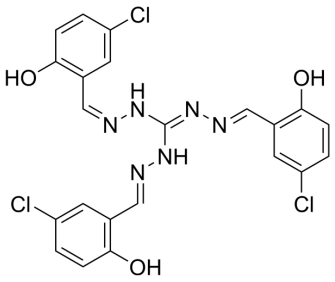
CWI1-2

Cat. No.:	HY-153274
CAS No.:	2408590-36-1
Molecular Formula:	$C_{22}H_{17}Cl_3N_6O_3$
Molecular Weight:	519.77
Target:	Apoptosis
Pathway:	Apoptosis
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 (192.39 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.9239 mL	9.6196 mL	19.2393 mL
	5 mM	0.3848 mL	1.9239 mL	3.8479 mL
	10 mM	0.1924 mL	0.9620 mL	1.9239 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: 1.25 mg/mL (2.40 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

CWI1-2 is an IGF2BP2 inhibitor that binds IGF2BP2 and inhibits its interaction with m6A-modified target transcripts, induces apoptosis and differentiation, and shows promising anti-leukemic effects[1].

In Vitro

CWI1-2 (0-1 μM, 24 h) has good anti-leukemic efficacy[1].

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

Apoptosis Analysis[1]

Cell Line:	MonoMac6, MOLM13
Concentration:	0-1 μM
Incubation Time:	24 h

Result:	Induced significant cell differentiation and apoptosis in a concentration-dependent manner in IGF2BP2-high cells but not in IGF2BP2-low cells. Reduced Gln uptake and impaired mitochondrial function, resulting in reduced ATP production in AML cells. Significantly inhibited the colony-forming ability of MA9-induced leukemic mouse blasts and greatly impairs the self-renewal of LSC/LIC.

In Vivo

CWI1-2 (5 mg/kg, i.v., once daily, 7-10 days) can significantly delay the onset of leukemia and prolong the survival time of BMT recipient B6.SJL (CD45.1) mice without any loss in body weight[1].

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

REFERENCES

[1]. Hengyou Weng, et al. The m6A reader IGF2BP2 regulates glutamine metabolism and represents a therapeutic target in acute myeloid leukemia. Cancer Cell. 2022 Dec 12;40(12):1566-1582.e10.

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