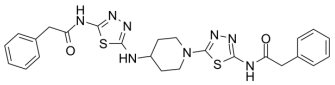
UPGL00004

Cat. No.:	HY-119377
CAS No.:	1890169-95-5
Molecular Formula:	$C_{25}H_{26}N_8O_2S_2$
Molecular Weight:	534.66
Target:	Glutaminase
Pathway:	Metabolic Enzyme/Protease
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 (233.79 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.8703 mL	9.3517 mL	18.7035 mL
	5 mM	0.3741 mL	1.8703 mL	3.7407 mL
	10 mM	0.1870 mL	0.9352 mL	1.8703 mL

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

BIOLOGICAL ACTIVITY

Description

UPGL00004 is a potent allosteric glutaminase C (GAC) inhibitor (IC_{50}=29 nM; K_d=27 nM). UPGL00004 strongly inhibits the proliferation of highly aggressive triple-negative breast cancer cell lines[1].

IC_{50} & Target

IC50: 29 nM (Glutaminase C)[1]
Kd: 27 nM (Glutaminase C)[1]

In Vitro

UPGL00004 inhibits MDA-MB-231, HS578T and TSE cells with IC_{50}s of 70, 129, and 262 nM, respectively[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

The combination of UPGL00004 (1 mg/kg body weight) and Bevacizumab (2.5 mg/kg body weight) via intraperitoneal injection completely prevent any detectable increase in tumor size in a triple-negative breast cancer patient-derived tumor graft model[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Huang Q, et al. Characterization of the interactions of potent allosteric inhibitors with glutaminase C, a key enzyme in cancer cell glutamine metabolism. J Biol Chem. 2018 Mar 9;293(10):3535-3545.

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