SHMT-IN-2

Cat. No.: HY-129226

CAS No.: 2102681-49-0

Molecular Formula: $C_{22}H_{24}F_3N_5O$

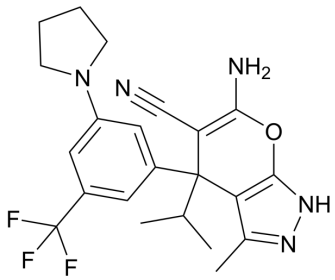
Molecular Weight: 431.45

Target: SHMT

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (231.78 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3178 mL	11.5888 mL	23.1777 mL
	5 mM	0.4636 mL	2.3178 mL	4.6355 mL
	10 mM	0.2318 mL	1.1589 mL	2.3178 mL

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

BIOLOGICAL ACTIVITY

Description

SHMT-IN-2 is a stereo specific inhibitor of human SHMT1/2 with IC_{50} values of 13 nM and 66 nM for SHMT1 and SHMT2, respectively. SHMT-IN-2 can block the growth of many human cancer cells, and has sensitivity for B-cell lymphomas[1].

IC_{50} & Target

IC50: 2800 nM (SHMT1); IC50: 36 nM (SHMT2) [1]

In Vitro

SHMT-IN-2 (compound 2) can inhibit cell growth with cellular IC_{50} values of 2800 nM and 36 nM for SHMT1 and SHMT2, respectively[1].

SHMT-IN-2 (30 μM) shows the growth sensitivity with the median IC_{50} was 4 μM to a panel of nearly 300 human cancer cell lines (with IC_{50} values of 1.72 μM and 1.73 μM for CCRF-CEM and HT,respectively), cell lines of B-cell lymphoma origin were enriched in the more sensitive half of cells[1].

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

REFERENCES

[1]. regory S Ducker, et al. Human SHMT inhibitors reveal defective glycine import as a targetable metabolic vulnerability of diffuse large B-cell lymphoma. Proc Natl Acad

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