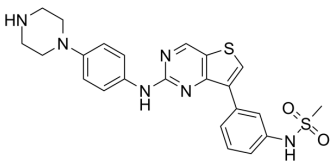
FLT3-IN-17

Cat. No.:	HY-148070
CAS No.:	2758999-62-9
Molecular Formula:	$C_{23}H_{24}N_6O_2S_2$
Molecular Weight:	480.61
Target:	FLT3; FAK; Cytochrome P450
Pathway:	Protein Tyrosine Kinase/RTK; Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 7.5 mg/mL (15.61 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0807 mL	10.4034 mL	20.8069 mL
	5 mM	0.4161 mL	2.0807 mL	4.1614 mL
	10 mM	0.2081 mL	1.0403 mL	2.0807 mL

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

BIOLOGICAL ACTIVITY

Description

FLT3-IN-17 inhibits CYPs and FLT3 mutants activity (IC_{50}s: <0.5 nM for D835Y). FLT3-IN-17 is also a FAK inhibitor, with an IC_{50} value of 12 nM. FLT3 ligand-2 can be used in the research of cancers[1].

IC_{50} & Target

IC50: 12 nM (FAK), <0.5 nM (D835Y)[2].

In Vitro

FLT3-IN-17 (compound 25, 72 h) inhibits cell growth in HCT-116, MDA-MB-231, A375 cells[1].
FLT3-IN-17 (10 μM) inhibits cytochrome P450s (CYPs) with inhibition rates >55%[1].
FLT3-IN-17 inhibits FLT3 mutants activity (IC_{50}s: <0.5 nM for D835Y, 1.6-183 nM for Ba/F3)[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[1]

Cell Line:	HCT-116, MDA-MB-231, A375 cells
Concentration:	0-1 μM approximately
Incubation Time:	72 h

Result:	Inhibited cell growth with IC_{50} values of 0.25, 0.46, 0.49 μM respectively.

REFERENCES

[1]. Hanna Cho, et al. Identification of Thieno[3,2- d]pyrimidine Derivatives as Dual Inhibitors of Focal Adhesion Kinase and FMS-like Tyrosine Kinase 3. J Med Chem. 2021 Aug 26;64(16):11934-11957.

Caution: Product has not been fully validated for medical applications. For research use only.

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