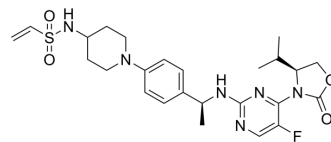


IHMT-IDH1-053

Cat. No.:	HY-149359
Molecular Formula:	C ₂₅ H ₃₃ FN ₆ O ₄ S
Molecular Weight:	532.63
Target:	Isocitrate Dehydrogenase (IDH)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	IHMT-IDH1-053 (compound 16) is a highly selectivity and irreversible IDH1-mutant inhibitor with an IC ₅₀ of 4.7 nM for IDH1 R132H. IHMT-IDH1-053 displays high selectivity against IDH1 mutants over IDH1 wt and IDH2 wt/mutants. IHMT-IDH1-053 inhibits 2-hydroxyglutarate (2-HG) production in IDH1 R132H mutant transfected 293T cells (IC ₅₀ =28 nM). IHMT-IDH1-053 binds to the IDH1 R132H protein in the allosteric pocket adjacent to the NADPH binding pocket through a covalent bond with residue Cys269. IHMT-IDH1-053 inhibits the proliferation of HT1080 cell line and primary AML cells which both bear IDH1 R132 mutants ^[1] .		
IC ₅₀ & Target	R132H IDH1 4.7 μM (IC ₅₀)	IDH1 wt	IDH2 wt

REFERENCES

[1]. Qianmao Liang, et al. Structure-based discovery of IHMT-IDH1-053 as a potent irreversible IDH1 mutant selective inhibitor. Eur J Med Chem. 2023 Aug 5;256:115411.

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

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