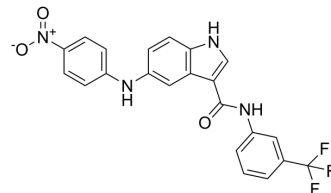


hDHODH-IN-12

Cat. No.:	HY-149877
Molecular Formula:	C ₂₂ H ₁₅ F ₃ N ₄ O ₃
Molecular Weight:	440.37
Target:	DNA/RNA Synthesis; Dihydroorotate Dehydrogenase
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	hDHODH-IN-12 is a potent DHODH inhibitor with an IC ₅₀ value of 0.421 μM. DHODH is the rate-limiting enzyme in the de novo synthesis of pyrimidine which is essential in DNA/RNA Synthesis. hDHODH-IN-12 is present in the inner membrane of human mitochondria. hDHODH-IN-12 can be used for the research of lung cancer ^[1] .								
IC₅₀ & Target	IC ₅₀ : 0.421 μM (DHODH) ^[1]								
In Vitro	<p>hDHODH-IN-12 (compound 5c) (100 μM; 24 h) reduces cell viability in A549, H1299 and H1975 cell lines^[1]. The TC₅₀ of A549, H1299, and H1975 cells are 11, 11 and 15 μM, respectively^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>A549, H1299, and H1975 cells</td> </tr> <tr> <td>Concentration:</td> <td>100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Reduced cell viability by more than 50%.</td> </tr> </table>	Cell Line:	A549, H1299, and H1975 cells	Concentration:	100 μM	Incubation Time:	24 h	Result:	Reduced cell viability by more than 50%.
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Concentration:	100 μM								
Incubation Time:	24 h								
Result:	Reduced cell viability by more than 50%.								

REFERENCES

[1]. Nada H, et al. Identification of Potent hDHODH Inhibitors for Lung Cancer via Virtual Screening of a Rationally Designed Small Combinatorial Library. ACS Omega. 2023 Jun 8;8(24):21769-21780.

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

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