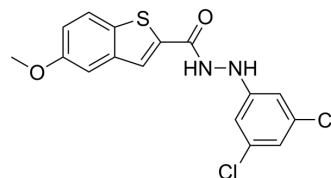


CLK1-IN-2

Cat. No.:	HY-152219
Molecular Formula:	C ₁₆ H ₁₂ Cl ₂ N ₂ O ₂ S
Molecular Weight:	367.25
Target:	CDK
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CLK1-IN-2 is metabolically stable Clk1 inhibitor. CLK1-IN-2 has selectivity for Clk1 with an IC ₅₀ value of 1.7 nM. CLK1-IN-2 can be used for the research of tumour, Duchenne's muscular dystrophy and viral infections such as HIV-1 and influenza ^[1] .								
IC₅₀ & Target	IC ₅₀ : 1.7 nM (Clk1) ^[1] .								
In Vitro	<p>CLK1-IN-2 (Compound 27a) has selectivity for Clk1 with an IC₅₀ value of 1.7 nM^[1].</p> <p>CLK1-IN-2 shows long metabolic half-lives of 6.4 h^[1].</p> <p>CLK1-IN-2 exhibits a GI₅₀ of 3.4 μM in T24 cancer cells^[1].</p> <p>CLK1-IN-2 shows a cellular K_i value of 0.051 μM in NanoBRET cellular Clk1 engagement assay^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Human dermal fibroblasts</td> </tr> <tr> <td>Concentration:</td> <td>15 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>2 days</td> </tr> <tr> <td>Result:</td> <td>Not affected the proliferation of normal human cells such as fibroblasts.</td> </tr> </table>	Cell Line:	Human dermal fibroblasts	Concentration:	15 μM	Incubation Time:	2 days	Result:	Not affected the proliferation of normal human cells such as fibroblasts.
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REFERENCES

[1]. Dalia S El-Gamil, et al. Discovery of novel 5-methoxybenzothiophene hydrazides as metabolically stable Clk1 inhibitors with high potency and unprecedented Clk1 isoenzyme selectivity. *Eur J Med Chem.* 2022 Dec 15;247:115019.

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

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