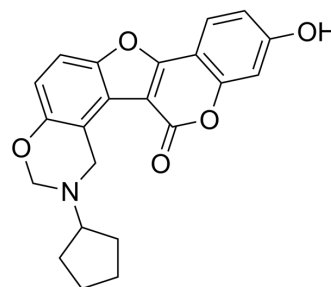


## Pks13-TE inhibitor 2

Cat. No.:	HY-151598
Molecular Formula:	C <sub>22</sub> H <sub>19</sub> NO <sub>5</sub>
Molecular Weight:	377.39
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Pks13-TE inhibitor 2 (compound 32) is a 13-Thioesterase (Pks13-TE) inhibitor (IC <sub>50</sub> =1.30 μM). Pks13-TE inhibitor 2 shows good anti-tuberculosis activity against both agent-sensitive and drug-resistant Mtb strains (MIC=0.0039-0.0078 μg/mL). Pks13-TE inhibitor 2 can be used in studies of multidrug-resistant TB and extensively drug-resistant TB <sup>[1]</sup> .									
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 1.30 μM (Pks13-TE) <sup>[1]</sup> .									
<b>In Vitro</b>	<p>Pks13-TE inhibitor 2 (0-5.43 μM; 7 days) demonstrates potent activities against DS (drug-susceptible Mtb strain)-tuberculosis-TB and DR (drug-resistant strain of Mtb-tuberculosis)-TB strains with MIC range of 0.0039-0.0078 μg/mL<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>DS (drug-susceptible Mtb strain)-tuberculosis (V4207), MDR (multidrug-resistant strain of Mtb, resistance to isoniazid and rifampin)-tuberculosis (V2475 and KZN494), XDR (extensively drug-resistant strain of Mtb resistant to isoniazid, rifampin, levofloxacin ofloxacin, and kanamycin)-tuberculosis (TF274 and R506) strains</td> </tr> <tr> <td>Concentration:</td> <td>0-5.43 μM (0-2048 μg/mL)</td> </tr> <tr> <td>Incubation Time:</td> <td>7 days</td> </tr> <tr> <td>Result:</td> <td>Inhibited V4207/DS Mtb strain (MIC=0.0078 μg/mL) and the MIC values for V2475/MDR, KZN494/MDR, TF274/XDR and R506/XDR Mtb strains were 0.0039 μg/mL.</td> </tr> </table>		Cell Line:	DS (drug-susceptible Mtb strain)-tuberculosis (V4207), MDR (multidrug-resistant strain of Mtb, resistance to isoniazid and rifampin)-tuberculosis (V2475 and KZN494), XDR (extensively drug-resistant strain of Mtb resistant to isoniazid, rifampin, levofloxacin ofloxacin, and kanamycin)-tuberculosis (TF274 and R506) strains	Concentration:	0-5.43 μM (0-2048 μg/mL)	Incubation Time:	7 days	Result:	Inhibited V4207/DS Mtb strain (MIC=0.0078 μg/mL) and the MIC values for V2475/MDR, KZN494/MDR, TF274/XDR and R506/XDR Mtb strains were 0.0039 μg/mL.
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### REFERENCES

[1]. Zhang W, et al. Structure-Based Optimization of Coumestan Derivatives as Polyketide Synthase 13-Thioesterase(Pks13-TE) Inhibitors with Improved hERG Profiles for Mycobacterium tuberculosis Treatment. J Med Chem. 2022 Oct 13;65(19):13240-13252.

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

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