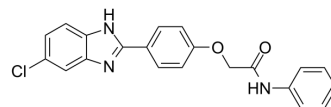


## LasR-IN-2

Cat. No.:	HY-151164
CAS No.:	3033530-61-6
Molecular Formula:	C <sub>21</sub> H <sub>16</sub> ClN <sub>3</sub> O <sub>2</sub>
Molecular Weight:	377.82
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	LasR-IN-2 is a LasR inhibitor that forms H-bonding with TRY-56 residue. LasR-IN-2 can be used in the research of bacterial infection, neutropenia, severe burns and chronic lung disease in cystic fibrosis (CF) <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	LasR <sup>[1]</sup>								
<b>In Vitro</b>	<p>LasR-IN-2 (Compound 8a, 4.68-150 µg/mL, 24 h) inhibits <i>P. aeruginosa</i> growth<sup>[1]</sup>.</p> <p>LasR-IN-2 (18.5 µM, 24 h) inhibits biofilm formation, pyocyanin production, and rhamnolipids production<sup>[1]</sup>.</p> <p>LasR-IN-2 (24 h) inhibits human dermal fibroblasts (HDFa) growth with an IC<sub>50</sub> value of 102 µM<sup>[1]</sup>.</p> <p>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><i>P. aeruginosa</i> (ATCC27853)</td> </tr> <tr> <td>Concentration:</td> <td>4.68-150 µg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited bacterial growth with a MIC value of 74.40 µM.</td> </tr> </table>	Cell Line:	<i>P. aeruginosa</i> (ATCC27853)	Concentration:	4.68-150 µg/mL	Incubation Time:	24 h	Result:	Inhibited bacterial growth with a MIC value of 74.40 µM.
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Concentration:	4.68-150 µg/mL								
Incubation Time:	24 h								
Result:	Inhibited bacterial growth with a MIC value of 74.40 µM.								

### REFERENCES

[1]. Rehab H Abd El-Aleam, et al. Design and synthesis of novel benzimidazole derivatives as potential *Pseudomonas aeruginosa* anti-biofilm agents inhibiting LasR: Evidence from comprehensive molecular dynamics simulation and in vitro investigation. *Eur J Med Chem.* 2022 Aug 5;241:114629.

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

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