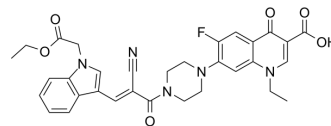


## Antibacterial agent 205

Cat. No.:	HY-162429
Molecular Formula:	C <sub>32</sub> H <sub>30</sub> FN <sub>5</sub> O <sub>6</sub>
Molecular Weight:	599.61
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Antibacterial agent 205 (Compound 10d) is an indolylacryloyl-derived oxacin, which exhibits broad antibacterial spectrum with MIC of 0.25-0.5 µg/mL. Antibacterial agent 205 reduces the exopolysaccharide, eliminates the biofilm, and thus attenuates the drug resistance. Antibacterial agent 205 exhibits antibacterial activity through destory of membrane integrity, accumulation of reactive oxygen species ROS, and inhibition of DNA replication <sup>[1]</sup> .								
<b>In Vitro</b>	<p>Antibacterial agent 205 exhibits antimicrobial activity against Enterococcus, Staphylococcus, Escherichia, Acinetobacter and Pseudomonas strains with MIC between 0.25-0.5 µg/mL<sup>[1]</sup>.</p> <p>Antibacterial agent 205 (0-256 µg/mL) exhibits low hemolysis, low cytotoxicity in blood, human hepatocytes (LO2) and HUVECs, and good compatibility with red blood cells<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" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Cell Line:</td> <td>LO2, HUVEC</td> </tr> <tr> <td>Concentration:</td> <td>2-64 µg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td></td> </tr> <tr> <td>Result:</td> <td>Inhibited cell viability slightly in dose-dependent manner.</td> </tr> </table>	Cell Line:	LO2, HUVEC	Concentration:	2-64 µg/mL	Incubation Time:		Result:	Inhibited cell viability slightly in dose-dependent manner.
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### REFERENCES

[1]. Hu YG, et al., Discovery of indolylacryloyl-derived oxacins as novel potential broad-spectrum antibacterial candidates. *Eur J Med Chem.* 2024 Apr 15;270:116392.

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

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