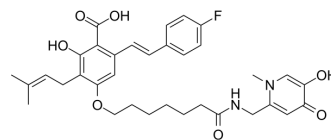


Antibacterial agent 202

Cat. No.:	HY-161404
Molecular Formula:	C ₃₄ H ₃₉ FN ₂ O ₇
Molecular Weight:	606.68
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Antibacterial agent 202 (compound 45c) is a low cytotoxic bacterial inhibitor with good activity against Gram-negative bacteria, including <i>Escherichia coli</i> , <i>Klebsiella pneumoniae</i> , especially <i>Pseudomonas aeruginosa</i> , (MIC (minimum inhibitory concentration)=7.8-31.25 μM). Antibacterial agent 202 can exert antibacterial activity by destroying the integrity of cell membranes and can be used in the research of bacterial infections ^[1] .								
In Vitro	<p>Antibacterial agent 202 (12.5-50 μM; 24-72 h) exhibits antibacterial efficacy in <i>C. Elegans</i> infection model^[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><i>P. aeruginosa</i> PAO1-infected <i>C. elegans</i> model</td> </tr> <tr> <td>Concentration:</td> <td>12.5, 25, 50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24, 48, 72 h</td> </tr> <tr> <td>Result:</td> <td>Increased the survival rate of <i>C. elegans</i> to 50% after 72 h.</td> </tr> </table>	Cell Line:	<i>P. aeruginosa</i> PAO1-infected <i>C. elegans</i> model	Concentration:	12.5, 25, 50 μM	Incubation Time:	24, 48, 72 h	Result:	Increased the survival rate of <i>C. elegans</i> to 50% after 72 h.
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REFERENCES

[1]. Huang YJ, et al. Cajaninstilbene acid derivatives conjugated with siderophores of 3-hydroxypyridin-4(1H)-ones as novel antibacterial agents against Gram-negative bacteria based on the Trojan horse strategy. *Eur J Med Chem.* 2024 Apr 5;269:116339.

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

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