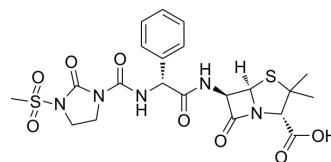


## Mezlocillin

<b>Cat. No.:</b>	HY-B1466A
<b>CAS No.:</b>	51481-65-3
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>25</sub> N <sub>5</sub> O <sub>8</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	539.58
<b>Target:</b>	Antibiotic; Bacterial
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Mezlocillin (BAY-f 1353) is a $\beta$ -lactam antibiotic, a semisynthetic and extended-spectrum antibiotic. Mezlocillin is active against both gram-negative and gram-positive bacteria. Mezlocillin can be used in bacterial infection research <sup>[1][2]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	$\beta$ -lactam								
<b>In Vivo</b>	<p>Mezlocillin (subcutaneous injection; 1.7-5.7 mg/kg; twice daily; 7 d) treatment in vivo suppresses the IgM and IgG responses and the delayed-type hypersensitivity reaction, observes the loss of hair, and inhibits lymphocyte proliferation of animals treated with all doses<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Male Balb/c mice<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>1.7, 4.3, and 5.7 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Subcutaneous injection; 1.7, 4.3, and 5.7 mg/kg; twice daily; 7 days</td> </tr> <tr> <td>Result:</td> <td>           Suppressed the IgM and IgG responses and the delayed-type hypersensitivity reaction treated with all doses.            Observed a loss of hair in the majority of animals treated with all doses.            Inhibited lymphocyte proliferation of spleen-cell cultures from animals.         </td> </tr> </table>	Animal Model:	Male Balb/c mice <sup>[1]</sup>	Dosage:	1.7, 4.3, and 5.7 mg/kg	Administration:	Subcutaneous injection; 1.7, 4.3, and 5.7 mg/kg; twice daily; 7 days	Result:	Suppressed the IgM and IgG responses and the delayed-type hypersensitivity reaction treated with all doses. Observed a loss of hair in the majority of animals treated with all doses. Inhibited lymphocyte proliferation of spleen-cell cultures from animals.
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### REFERENCES

- [1]. Roszkowski W, et al. Antibiotics and immunomodulation: effects of cefotaxime, amikacin, mezlocillin, piperacillin and clindamycin. *Med Microbiol Immunol.* 1985;173(5):279-89.
- [2]. Bodey GP, et al. Mezlocillin: in vitro studies of a new broad-spectrum penicillin. *Antimicrob Agents Chemother.* 1977 Jan;11(1):74-9.
- [3]. Kristof RA, et al. Treatment of accidental high dose intraventricular mezlocillin application by cerebrospinal fluid exchange. *J Neurol Neurosurg Psychiatry.* 1998 Mar;64(3):379-81.

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

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