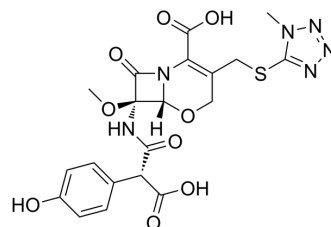


## Moxalactam

Cat. No.:	HY-B1484A
CAS No.:	64952-97-2
Molecular Formula:	C <sub>20</sub> H <sub>20</sub> N <sub>6</sub> O <sub>9</sub> S
Molecular Weight:	520.47
Target:	Bacterial; Antibiotic; Beta-lactamase
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Moxalactam (Latamoxef) is a synthetic oxa-β-lactam antibiotic. Moxalactam has a broad spectrum of activity against Gram-positive and Gram-negative aerobic and anaerobic bacteria. Moxalactam inhibits production of β-lactamases <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	β-lactam								
<b>In Vitro</b>	<p>Moxalactam (Latamoxef) inhibits 90% of strains of Escherichia coli, Klebsiella species, Proteus species, Morganella morganii, Neisseria gonorrhoeae, Neisseria meningitidis, Haemophilus influenzae and Salmonella species, including strains which are resistant to <a href="#">Cephalothin</a> (HY-B1275A) and <a href="#">Gentamicin</a> (HY-A0276A) at concentrations of less than 1 μg/mL<sup>[1]</sup>.</p> <p>Moxalactam exhibits moderate activity against P. aeruginosa and is usually active against other species of Pseudomonas, Acinetobacter species are usually resistant to Moxalactam<sup>[1]</sup>.</p> <p>Moxalactam has marked stability in vitro against a variety of β-lactamases, including that produced by B. fragilis, inhibits production of β-lactamases and does not induce class I β-lactamase<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>								
<b>In Vivo</b>	<p>Moxalactam (Latamoxef) (0-7.4 mg/mouse; s.c.; once) is effective against bacterial infections in mice<sup>[2]</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>Four-week-old male strain ICR mice, weighing 18-20 g, bacterial infection model<sup>[2]</sup></td> </tr> <tr> <td>Dosage:</td> <td>0-7.4 mg/mouse</td> </tr> <tr> <td>Administration:</td> <td>Subcutaneous injection, once</td> </tr> <tr> <td>Result:</td> <td>Showed protective activity with ED<sub>50</sub>s less than 7.4 mg/mouse against gram-positive and gram-negative bacterial infected mice.</td> </tr> </table>	Animal Model:	Four-week-old male strain ICR mice, weighing 18-20 g, bacterial infection model <sup>[2]</sup>	Dosage:	0-7.4 mg/mouse	Administration:	Subcutaneous injection, once	Result:	Showed protective activity with ED <sub>50</sub> s less than 7.4 mg/mouse against gram-positive and gram-negative bacterial infected mice.
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### CUSTOMER VALIDATION

- Biomed Res Int. 2018 Jul 2;2018:3579832.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

- [1]. Goto S. In vitro and in vivo antibacterial activity of moxalactam, an oxa- $\beta$ -lactam antibiotic. *Clinical Infectious Diseases*, 1982, 4(Supplement\_3): S501-S510.
- [2]. Carmine AA, et al. Moxalactam (latamoxef). A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. *Drugs*. 1983 Oct;26(4):279-333.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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