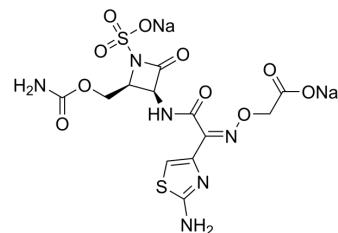


## Carumonam disodium

<b>Cat. No.:</b>	HY-107328
<b>CAS No.:</b>	86832-68-0
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>12</sub> N <sub>6</sub> Na <sub>2</sub> O <sub>10</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	510.37
<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>	Carumonam disodium is a potent antibiotic. Carumonam disodium shows antibacterial activity. Carumonam disodium induces seizure <sup>[1][2]</sup> .								
<b>In Vitro</b>	Carumonam disodium (0-100 µg/mL) shows antibacterial activity with MIC <sub>90</sub> s of 0.2, 3.13, 0.2, 0.39, 0.2, 6.25, 0.2, 3.13, 0.05, 0.025, 0.78, 0.013, 0.025 µg/mL for <i>Escherichia coli</i> (cefazolin sensitive), <i>Escherichia coli</i> (cefazolin resistant), <i>Klebsiella pneumoniae</i> (cefazolin sensitive), <i>Klebsiella pneumoniae</i> (cefazolin resistant), <i>Klebsiella oxytoca</i> , <i>Enterobacter cloacae</i> , <i>Serratia marcescens</i> (gentamicin sensitive), <i>Serratia marcescens</i> (gentamicin resistant), <i>Proteus vulgaris</i> , <i>Proteus mirabilis</i> , <i>Proteus morganii</i> , <i>Proteus rettgeri</i> , <i>Proteus inconstans</i> , respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	Carumonam disodium (1.31-6.89 mmol/kg; i.p.) induces seizure in DBA/2, Swiss and C57 mice <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>16-24g, 42-48 days DBA/2; 18-28, 42-48 days Swiss and C57 mice<sup>[2]</sup></td> </tr> <tr> <td>Dosage:</td> <td>1.31-6.89 mmol/kg</td> </tr> <tr> <td>Administration:</td> <td>i.p.</td> </tr> <tr> <td>Result:</td> <td>Induced seizure in DBA/2, Swiss and C57 mice.</td> </tr> </table>	Animal Model:	16-24g, 42-48 days DBA/2; 18-28, 42-48 days Swiss and C57 mice <sup>[2]</sup>	Dosage:	1.31-6.89 mmol/kg	Administration:	i.p.	Result:	Induced seizure in DBA/2, Swiss and C57 mice.
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### REFERENCES

- [1]. Imada A, et al. In vitro and in vivo antibacterial activities of carumonam (AMA-1080), a new N-sulfonated monocyclic beta-lactam antibiotic. *Antimicrob Agents Chemother.* 1985 May;27(5):821-7.
- [2]. De Sarro A, et al. Comparative epileptogenic properties of two monobactam derivatives in C57, Swiss and DBA/2 mice. *J Antimicrob Chemother.* 1996 Sep;38(3):475-84.

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

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