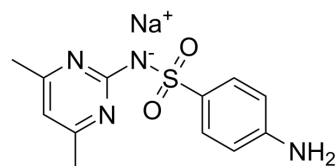


Sulfamethazine sodium

Cat. No.:	HY-B0035A
CAS No.:	1981-58-4
Molecular Formula:	C ₁₂ H ₁₃ N ₄ NaO ₂ S
Molecular Weight:	300.31
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Sulfamethazine sodium (Sulfadimidine sodium) is an antimicrobial that is widely used to treat and prevent various animal diseases (such as gastrointestinal and respiratory tract infections). In China and the European Commission, the maximum residue level for Sulfamethazine sodium in animal product is set at 100 µg/kg ^{[1][2]} .								
IC₅₀ & Target	Bacterial ^[1]								
In Vivo	<p>Sulfamethazine (80 mg/kg; intravenous injection; healthy female pigs) treatment significantly reduces α, β and AUC_{0-∞}, significantly increases t_{1/2α}, Vd and CIB, and upon a single intramuscular administration of 80 mg/kg of Sulfamethazine the absolute bioavailability in pigs is 1.01^[1].</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>19 healthy female pigs (6-week-old, 4.5-6.2 kg)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>80 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intravenous injection (Pharmacokinetic study)</td> </tr> <tr> <td>Result:</td> <td>The half-life in distribution phase is 0.23 h and half-lives in eliminations phase is 9.8 h. α, β and the AUC_{0-∞} were significantly decreased and t_{1/2α}, Vd and CIB were significantly increased, and the absolute bioavailability in pigs is 1.01.</td> </tr> </table>	Animal Model:	19 healthy female pigs (6-week-old, 4.5-6.2 kg) ^[1]	Dosage:	80 mg/kg	Administration:	Intravenous injection (Pharmacokinetic study)	Result:	The half-life in distribution phase is 0.23 h and half-lives in eliminations phase is 9.8 h. α , β and the AUC _{0-∞} were significantly decreased and t _{1/2α} , Vd and CIB were significantly increased, and the absolute bioavailability in pigs is 1.01.
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CUSTOMER VALIDATION

- Chemosphere. 2019 Jun;225:378-387.

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REFERENCES

[1]. VAN Poucke LSG, et al. Pharmacokinetics and Tissue Residues of Sulfathiazole and Sulfamethazine in Pigs. J Food Prot. 1994 Sep;57(9):796-801.

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

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