Proteins

Product Data Sheet

Ceftaroline fosamil (inner)

Cat. No.: HY-14738 CAS No.: 229016-73-3 Molecular Formula: $C_{22}H_{21}N_8O_8PS_4$

Molecular Weight: 684.68

Target: Bacterial; Antibiotic Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

BIOLOGICAL ACTIVITY

Description	Ceftaroline fosamil (inner) (TAK-599 free acid), a cephalosporin derivative, is an N-phosphono proagent of anti-methicillin-resistant Staphylococcus aureus (MRSA) T-91825. Ceftaroline fosamil (inner) can be used for the research of MRSA infection [1][2][3].
IC ₅₀ & Target	β-lactam
In Vivo	Ceftaroline fosamil inner salt (s.c.) shows protective effects against experimental systemic infection caused by S. aureus N133 in mice, with ED ₅₀ s of 1.60-2.37 mg/kg ^[1] . Ceftaroline fosamil inner salt (10 mg/kg; s.c.) disappeares rapidly and converts smoothly into T-91825 in blood of rats and monkeys ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Int J Antimicrob Agents. 2021 Sep 12;106434.
- Clin Chem. 2019 Dec;65(12):1522-1531.

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REFERENCES

- [1]. Ishikawa T, et, al. TAK-599, a novel N-phosphono type prodrug of anti-MRSA cephalosporin T-91825: synthesis, physicochemical and pharmacological properties. Bioorg Med Chem. 2003 May 29;11(11):2427-37.
- [2]. Jacqueline C, et, al. In vivo efficacy of ceftaroline (PPI-0903), a new broad-spectrum cephalosporin, compared with linezolid and vancomycin against methicillinresistant and vancomycin-intermediate Staphylococcus aureus in a rabbit endocarditis model. Antimicrob Agents Chemother. 2007 Sep;51(9):3397-400.
- [3]. Parish D, et, al. Ceftaroline fosamil, a cephalosporin derivative for the potential treatment of MRSA infection. Curr Opin Investig Drugs. 2008 Feb;9(2):201-9.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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