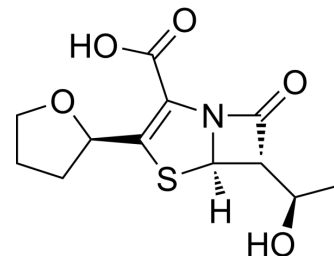


Faropenem

| | |
|--------------------|---|
| Cat. No.: | HY-A0035 |
| CAS No.: | 106560-14-9 |
| Molecular Formula: | C ₁₂ H ₁₅ NO ₅ S |
| Molecular Weight: | 285.32 |
| Target: | Antibiotic; Bacterial |
| Pathway: | Anti-infection |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | |
|-------------------------------------|---|
| Description | Faropenem is a potent and orally active beta-lactam antibiotic. Faropenem demonstrates broad-spectrum in vitro antimicrobial activity against many gram-positive and -negative aerobes and anaerobes. Faropenem is resistant to hydrolysis by nearly all beta-lactamases, including extended-spectrum beta-lactamases and AmpC beta-lactamases. Faropenem is developed as an oral proagent, faropenem medoxomil, for the research of respiratory tract infections ^{[1][2]} . |
| IC₅₀ & Target | β-lactam |
| In Vitro | Faropenem is not active against methicillin-resistant <i>Staphylococcus aureus</i> , vancomycin-resistant <i>Enterococcus faecium</i> , <i>Pseudomonas aeruginosa</i> or <i>Stenotrophomonas maltophilia</i> ^[1] . Faropenem is against all isolates of <i>B. anthracis</i> . The MIC values ranged from ≤0.06 to >64 µg/liter, and the MIC ₉₀ value is 0.5 µg/ml. The MIC ₉₀ value for Faropenem is lower than that observed for other β-lactams, such as Meropenem, Amoxicillin-clavulanate, and Penicillin, for which the MIC ₉₀ values are 4 µg/ml, 4 µg/ml, and 8 µg/ml, respectively ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |
| In Vivo | Faropenem (i.p. at 24 h postchallenge at 4-, 6-, and 12-h intervals; 10, 20, 40, and 80 mg/kg/day; 14 days) demonstrates a high level of activity against <i>B. anthracis</i> in the murine post-exposure prophylaxis inhalation model ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

CUSTOMER VALIDATION

- Int J Antimicrob Agents. 3 September 2022, 106669.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Kristen N Schurek, et al. Faropenem: review of a new oral penem. *Expert Rev Anti Infect Ther.* 2007 Apr;5(2):185-98.
- [2]. Stanley C Gill, et al. Pharmacokinetic-pharmacodynamic assessment of faropenem in a lethal murine *Bacillus anthracis* inhalation postexposure prophylaxis model.

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

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