**Sulopenem**

**Cat. No.:** HY-105284  
**CAS No.:** 120788-07-0  
**Molecular Formula:** C₁₂H₁₅NO₅S₃  
**Molecular Weight:** 349.45  
**Target:** Bacterial  
**Pathway:** Anti-infection  
**Storage:** Please store the product under the recommended conditions in the Certificate of Analysis.

**BIOLOGICAL ACTIVITY**

**Description**  
Sulopenem (CP-70429) is an orally active, parenteral penem antibiotic with broad-spectrum activities against Gram-positive and Gram-negative bacteria. Sulopenem has the potential for urinary tract infections and intra-abdominal infections treatment. Sulopenem is inactive against Pseudomonas aeruginosa and Xanthomonas maltophilia\(^1\)[2][3].

**IC\(_50\) & Target**  
**MIC:** 0.015-0.12 µg/mL (E. coli)[1]

**In Vitro**  
Sulopenem has the potential for uncomplicated and complicated urinary tract infections and intra-abdominal infections treatment, including multidrug-resistant (MDR) infections and infections attributable to quinolone-nonsusceptible and/or extended-spectrum β-lactamase (ESBL)-producing Gram-negative bacilli[2].  
Sulopenem inhibits the growth of most isolates of aerobic and anaerobic Gram-positive and Gram-negative bacteria, including methicillin-susceptible Staphylococcus aureus, Streptococcus pneumoniae (penicillin-susceptible and -resistant isolates), group A and B β-hemolytic streptococci, Listeria monocytogenes, Enterobacteriaceae, Haemophilus influenzae, and Moraxella catarrhalis but excluding P. aeruginosa and Stenotrophomonas maltophilia, at a concentration of ≤1 µg/mL[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**In Vivo**  
The protective effects of Sulopenem in murine experimental systemic infections are superior to those of Imipenem/Cilastatin. In murine experimental mixed infection with Escherichia coli and Bacteroides fragilis, Sulopenem has lower ED\(_{50}\). In guinea pigs experimental lung infection with Klebsiella pneumoniae, Sulopenem is more effective than CZON or Cefotiam[3].

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**REFERENCES**


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