



## **Aztreonam**

**Catalog No: tcsc1902** 

Available Sizes
Size: 100mg
Size: 200mg
Size: 500mg
Specifications
<b>CAS No:</b> 78110-38-0
Formula: C <sub>13</sub> H <sub>17</sub> N <sub>5</sub> O <sub>8</sub> S <sub>2</sub>
Pathway: Anti-infection
Target: Bacterial
Purity / Grade: >98%
Solubility: H2O: 10 mg/mL (22.97 mM; Need ultrasonic); DMSO: 50 mg/mL (114.83 mM; Need ultrasonic)
Alternative Names: SQ-26,776
Observed Molecular Weight:

## **Product Description**

435.43





Aztreonam is a synthetic monocyclic beta-lactam antibiotic, which has a very high affinity for penicillin-binding protein 3 (PBP-3).

Target: Penicillin-binding proteins 3 (PBP-3)

Aztreonam is a synthetic monocyclic beta-lactam antibiotic (a monobactam), with the nucleus based on a simpler monobactam isolated from Chromobacterium violaceum. It was approved by the U.S. Food and Drug Administration in 1986. It is resistant to some beta-lactamases, but is inactivated by extended-spectrum beta-lactamases. Aztreonam has no useful activity against gram-positive or anaerobic microorganisms

Aztreonam is similar in action to penicillin. It inhibits mucopeptide synthesis in the bacterial cell wall, thereby blocking peptidoglycan crosslinking. It has a very high affinity for penicillin-binding protein 3 (PBP-3) and mild affinity for PBP-1a. Aztreonam binds the penicillin-binding proteins of gram-positive and anaerobic bacteria very poorly and is largely ineffective against them. Aztreonam is bactericidal but less so than some of the cephalosporins

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!