Ticarcillin disodium salt

Product Number  T 5639  
Storage Temperature  2-8 °C

Product Description
Molecular Formula:  C_{15}H_{14}N_{2}O_{6}S_{2}Na_{2}  
Molecular Weight:  428.4  
CAS Number:  4697-14-7  
Synonyms:  [2S-(2α,5α,6β(S*)]-6-[(carboxy-3-thienylacetyl)amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid disodium; N-(2-carboxy-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]hept-6-yl)-3-thiophenemalonamic acid disodium; 6-[D(--)-α-carboxy-3-thienylacetamido]penicillinanic acid disodium

Ticarcillin is a broad spectrum, semi-synthetic carboxypenicillin antibiotic that is related to penicillin. It has a greater spectrum of activity compared to ampicillin and a particular affinity for Gram-negative organisms such as *Pseudomonas aeruginosa.* When ticarcillin is used in conjunction with the β-lactamase inhibitor clavulanic acid, the spectrum of activity is enhanced.\(^1\)

A report on the susceptibility of various *Bartonella* isolates to different antibiotics, including ticarcillin, has been described.\(^4\) The susceptibility of many *Acinetobacter* genospecies strains to several antibiotics has been probed, including the use of ticarcillin (16.0 µg/ml) together with clavulanate.\(^5\) A membrane filtration test for the presumptive differentiation of several *Candida* species that utilizes ticarcillin in conjunction with clavulanic acid has been published.\(^6\)

A reversed-phase LC assay for ticarcillin in plasma and urine has been reported.\(^7\) A method for the simultaneous determination of ticarcillin and clavulanate in rabbit serum and tissue cage fluid that combines HPLC with a wavelength switch technique has been published.\(^8\)

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in water (50 mg/ml), yielding a clear, colorless to faint yellow solution. Aqueous solutions of this product have a pH of 6-8. Acidic solutions of this product are less stable than aqueous solutions.\(^1\)

References
1. The Merck Index, 12th ed., Entry #9567.


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