Cefotaxime sodium salt

Product Number  C 7912
Storage Temperature  2-8 °C

Product Description
Molecular Formula:  C_{16}H_{16}N_{5}O_{7}S_{2}Na
Molecular Weight:  477.5
CAS Number:  64485-93-4

Cefotaxime is a broad-spectrum third-generation cephalosporin antibiotic with a wide spectrum of activity. It has particular potency against Gram-negative bacteria such as Enterobacteriaceae, *Haemophilus influenzae*, *Moraxella (Branhamella) catarrhalis*, and *Neisseria* species. It is also active against some Gram-positive bacteria such as staphylococci and streptococci. The active metabolite of cefotaxime, desacetylcefotaxime, also has antibacterial activity. A minimum inhibitory concentration range for cefotaxime against susceptible organisms has been described at 0.03 - 16 µg/ml.

Cefotaxime and other antibiotics have been used to probe the susceptibility of potentially pathogenic halophilic vibrios isolated from seafood. An in vitro study on the treatment of *Salmonella typhi*-infected human monocyte-derived macrophages with cefotaxime and ceftriaxone has been published.

Cefotaxime has been utilized to study the behavior of the pathogen *Clostridium difficile* and components of normal gut flora in a triple-stage chemostat model of the human gut.

Several HPLC methods have been published for the detection of cefotaxime and of desacetylcefotaxime in plasma and cerebrospinal fluid.

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, faint yellow to yellow solution. A 10% aqueous solution has a pH of 4.5 - 6.5.

References