

<b>Product Name:</b>	Cefteram
<b>Product Number:</b>	C102
<b>CAS Number:</b>	82547-58-8
<b>Molecular Formula:</b>	$C_{16}H_{17}N_9O_5S_2$
<b>Molecular Weight:</b>	479.49 g/mol
<b>Form:</b>	Powder
<b>Solubility:</b>	Acetonitrile: Very soluble Chloroform: Very soluble Ethanol: Very soluble Water: Practically insoluble
<b>Storage Conditions:</b>	-20 °C
<b>Description:</b>	Cefteram is a third generation cephalosporin antibiotic. Cefteram is freely soluble in methanol, ethanol, chloroform, and acetonitrile. In water, cefteram is essentially insoluble.
<b>Mechanism of Action:</b>	Like $\beta$ -lactams, cephalosporins interfere with PBP (penicillin binding protein) activity involved in the final phase of peptidoglycan synthesis. PBP's are enzymes which catalyze a pentaglycine crosslink between alanine and lysine residues providing additional strength to the cell wall. Without a pentaglycine crosslink, the integrity of the cell wall is severely compromised and ultimately leads to cell lysis and death. Resistance to cephalosporins is commonly due to cells containing plasmid encoded $\beta$ -lactamases.
<b>Spectrum:</b>	Like many third generation cephalosporins, cefteram is mostly active against gram negative bacteria especially those which cause meningitis and gonorrhea.
<b>References:</b>	Georgopapadakou, N. H. "Mechanisms of Action of Cephalosporin 3'-quinolone Esters, Carbamates, and Tertiary Amines in Escherichia Coli." <i>American Society for Microbiology</i> 37.3 (1992): 559-65. <i>Antimicrobial Agents and Chemotherapy</i> . Web. 21 Aug. 2012.