

## Cefotaxime Sodium Salt

### Product Information

Product Name	Cat#	Specification
Cefotaxime Sodium Salt	60226ES03	1 g
	60226ES08	5 g
	60226ES25	25 g
	60226ES60	100 g

### Product Description

Cefotaxime sodium salt is a semi synthetic third-generation cephalosporin antibiotic / antibacterial agent. It combines with penicillin binding proteins (PBPs) to prevent the conversion of peptides in the last step of peptidoglycan synthesis, inhibit the synthesis of peptidoglycan, affect the normal synthesis of bacterial cell wall, and finally make the bacteria cleave under the action of autolytic enzymes.

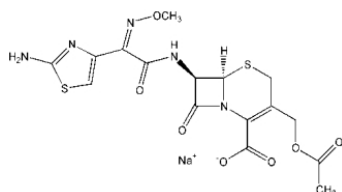
Cefotaxime is a broad-spectrum antibiotic, which significantly affects most Gram-negative bacteria other than *Pseudomonas* and most gram-positive cocci excluding enterococci. Compared with the first generation, the second generation cephalosporins showed stronger biological activity against Enterobacteriaceae. It can also act on some aminoglycoside resistant antibiotics, including gram-negative bacilli of amikacin. It can also act on penicillin resistant *Streptococcus pneumoniae*. It can also cooperate with penicillin or aminoglycoside antibiotics to selectively kill Gram-negative bacteria. The stability of lactamase can significantly inhibit the occurrence of bacterial drug resistance.

Cefotaxime does not have plant cytotoxicity, so it is also commonly used in *Agrobacterium tumefaciens* mediated transformation experiments to control bacterial growth. It can also be used in combination with vancomycin (Cat#60213). The commonly used effective concentration is 50-500 mg/L.

### Product Properties

<b>Synonyms</b>	Cefotax; Cefotaxim Sodium; Claforan; Sym-methoxyimino Cephalosporin
<b>CAS#</b>	64485-93-4
<b>Molecular Weight</b>	477.45 g/mol
<b>Molecular Formula</b>	C <sub>16</sub> H <sub>16</sub> N <sub>5</sub> NaO <sub>7</sub> S <sub>2</sub>
<b>Appearance</b>	White crystal or powder
<b>Purity</b>	> 98 %
<b>Solubility</b>	Dissolve in water (50 mg/mL), Almost insoluble in organic solvents.

### Structure



### Shipping and Storage

The product component is shipped with ice pack and can be stored at 2-8°C for 2 years.

### Cautions

1) For your safety and health, please wear experimental clothes and disposable gloves.

2) This product is only used for scientific research.