



Cefepime Dihydrochloride Monohydrate

A broad-spectrum antibiotic, effective against some multi-drug resistant bacteria like *pseudomonas aeruginosa* and *Acinetobacter baumannii*.

Cefepime dihydrochloride monohydrate powder is a potent antibiotic with a broad spectrum. as it effectively inhibits the growth of a wide spectrum of bacteria, it works as a key role in microbiology. This includes certain multi-drug resistance bacteria, such as *Acinetobacter baumannii* and *Pseudomonas aeruginosa*.

Cefepime works by interfering with the synthesis of bacterial cell walls. It binds itself to penicillin-binding proteins (PBPs) that are found in the cell wall of bacteria. Bacteria use these PBPs as vital enzymes to synthesis their cell walls. Cefepime interferes with the last phases of peptidoglycan formation, which is an essential part of the bacterial cell wall, by binding itself to PBPs. In the end, this causes the cell wall to weaken and causes cell death.

Cat. Number	AS-2003
CAS Number	123171-59-5
Additional CAS	107648-80-6
Additional CAS	88040-23-7
PubChems	310269474
Molecular Weight	571.50 g/mol
Molecular Formula	C ₁₉ H ₂₈ Cl ₂ N ₆ O ₆ S ₂
Storage Temperature	4°C
Form and Color	Powder to crystalline powder, white to pale yellow
Purity (HPLC)	Min. 98%
Solubility (5% in water)	Clear solution
Solubility (0.1% in DMSO)	Clear solution
1H-NMR Spectrum	Correspond to assigned structure.
Synonym	1-[(6R,7R)-7-[(2Z)-(2-Amino-4-thiazolyl)(methoxyimino)acetyl]amino]-2-carboxy-8-oxo-5-thia-1- azabicyclo[4.2.0]oct-2-en-3-yl]methyl]-1-methylpyrrol