Cephalexin hydrochloride

Preventing the cell wall synthesis

A strong first-generation cephalosporin antibiotic used in microbiology is cephalexin hydrochloride powder. It prevents the growth of bacteria, especially Gram-positive bacteria.

The mechanism of action of cephalexin hydrochloride powder is disruption of bacterial cell wall synthesis. Peptidoglycan is essential to the stability of bacterial cell walls. Like other beta-lactam antibiotics, cephalexin hydrochloride powder works by binding to a particular enzyme that is involved in the formation of peptidoglycan, thereby inhibiting its creation. As a result, the bacterial cell wall is weakened and eventually dies. Since cephalexin hydrochloride powder works mostly against gram-positive bacteria, it is not regarded as a broad-spectrum antibiotic, even if it has some activity against some gram-negative bacteria.

Cat. Number	AS-2008
CAS Number	59695-59-9
Molecular Weight	383.9 g/mol
Molecular Formula	$C_{16}H_{18}ClN_3O_4S$