

Sulfamethoxazole

Catalog No: tcsc2363



Available Sizes

Size: 100mg

Size: 500mg



Specifications

CAS No:

723-46-6

Formula:

$C_{10}H_{11}N_3O_3S$

Pathway:

Anti-infection

Target:

Bacterial

Purity / Grade:

>98%

Solubility:

H₂O :

Alternative Names:

Ro 4-2130;STX 608

Observed Molecular Weight:

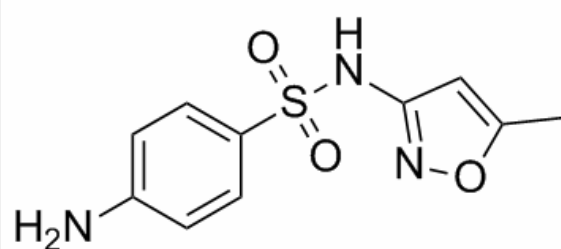
253.28

Product Description

Sulfamethoxazole is a sulfonamide bacteriostatic antibiotic.

Target: Antibacterial

Sulfonamides are structural analogs and competitive antagonists of para-aminobenzoic acid (PABA). They inhibit normal bacterial utilization of PABA for the synthesis of folic acid, an important metabolite in DNA synthesis. The effects seen are usually bacteriostatic in nature. Folic acid is not synthesized in humans, but is instead a dietary requirement. This allows for the selective toxicity to bacterial cells (or any cell dependent on synthesizing folic acid) over human cells. Bacterial resistance to sulfamethoxazole is caused by mutations in the enzymes involved in folic acid synthesis that prevent the drug from binding to it.



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