

Tetracycline (hydrochloride)

Catalog No: tcsc2588



Available Sizes

Size: 1g

Size: 5g



Specifications

CAS No:

64-75-5

Formula:

$C_{22}H_{25}ClN_2O_8$

Pathway:

Anti-infection

Target:

Bacterial

Purity / Grade:

>98%

Solubility:

DMSO : 10 mg/mL (20.79 mM; Need ultrasonic and warming)

Observed Molecular Weight:

480.9

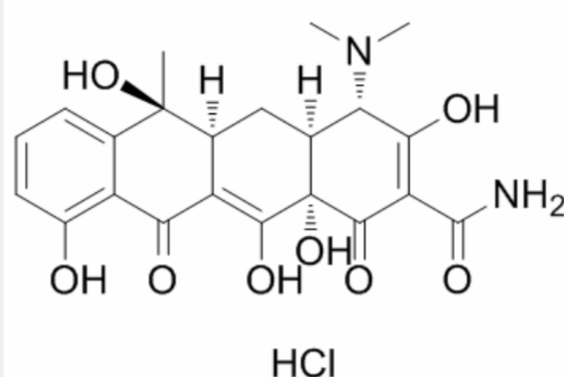
Product Description

Tetracycline (hydrochloride) is a broad-spectrum antibiotic, exhibiting activity against a wide range of gram-positive and gram-negative **bacteria**.

In Vitro: Tetracyclines are broad-spectrum agents, exhibiting activity against a wide range of gram-positive and gram-negative bacteria, atypical organisms such as chlamydiae, mycoplasmas, and rickettsiae, and protozoan parasites. Tetracyclines inhibit bacterial protein synthesis by preventing the association of aminoacyl-tRNA with the bacterial ribosome. Tetracyclines traverse the

outer membrane of gram-negative enteric bacteria through the OmpF and OmpC porin channels, as positively charged cation (probably magnesium)-tetracycline coordination complexes ^[1].

In Vivo: The tetracyclines have applications for the treatment of infections in poultry, cattle, sheep, and swine. In some cases, e.g., for therapeutic treatment of large numbers of poultry reared on commercial farms, the antibiotics are added directly to feed or water or can be administered in aerosols. Tetracyclines could be used as growth promotion or growth enhancement. Tetracyclines are used in aquaculture to control infections in salmon, catfish, and lobsters^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!