



Tetracyclin HCl, USP Grade

Product description

Tetracycline HCl is a broad spectrum polyketide antibiotic produced by the *Streptomyces* genus of Actinobacteria, exhibiting activity against a wide range of Gram-positive and Gram-negative bacteria. It exerts a bacteriostatic effect on bacteria by binding reversible to the bacterial 30S ribosomal subunit and blocking incoming aminoacyl tRNA from binding to the ribosome acceptor site. It also binds to some extent to the bacterial 50S ribosomal subunit and may alter the cytoplasmic membrane causing intracellular components to leak from bacterial cells. In cell biology, Tetracycline hydrochloride is commonly used as a selective agent for cells transformed with tetR gene. It is recommended for use in cell culture applications at 5-10 µg/mL.

Components

Components No.	Name	60212ES25	60212ES60
60212	Tetracyclin HCl, USP Grade	25 g	100 g

Specifications

Synonyms	Tetracycline hydrochloride, Tetracycline HCl, NCI-c55561, Achromycin V
CAS#	64-75-5
Formula	$C_{22}H_{24}N_2O_8 \cdot HCl$
Molecular Weight	480.9
Appearance	Yellow powder
Grade	USP
Potency (Anhydrous)	≥ 900 mcg/mg
Solubility	Soluble in water, DMSO and methanol
Structure	

Shipping and Storage

The product is shipped with dry ice and can be stored at -15°C ~ -25°C for two years. Aqueous stock solutions can be stored at -15°C ~ -25°C for one year.

Notes

1. The solution should not be autoclaved.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.