

Doxycycline Hydrochloride, 10mg/mL

Antibiotics

CATALOGUE NO.: MA018

DESCRIPTION:

Doxycycline is a semisynthetic broad-spectrum antibiotic or antibacterial belongs to the tetracycline family. It is used treat urinary tract infections, gum disease, and bacterial infections such as gonorrhea, chlamydia and Bacillus anthracis. It is also used to treat acne. Doxycycline is available in complex salt of hydrochloride, hemiethanolate, and hemihydrate hyclate for oral administration and for intravenous use. Doxycycline hyclate is a yellowish crystalline powder; soluble in water. Doxycycline will not degrade into an epianhydro form. The chemical designation is 4-(Dimethylamino)-1, 4, 4a, 5, 5a, 6, 11, 12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1, 11-dioxo-2-naphthacenecarboxamide. Tetracyclines inhibit bacterial protein synthesis by binding to the 30S ribosomal subunit. They acts as growth inhibitors (bacteriostatic) rather than killer of the infectious agent (bacteriocidal) and are only effective against multiplying microorganisms.

MOLECULAR WEIGHT: 480.9

STRUCTURE: $C_{22}H_{24}N_2O_8 \cdot HCl$

PACKING SIZE: 1mL

STABILITY: 4-8°C for 1 month; -20°C for long term storage

