

Clindamycin (hydrochloride)

Catalog No: tcsc2508



Available Sizes

Size: 100mg

Size: 1g

Size: 5g



Specifications

CAS No:

21462-39-5

Formula:

$C_{18}H_{34}Cl_2N_2O_5S$

Pathway:

Anti-infection

Target:

Bacterial

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 43 mg/mL (93.19 mM)

Observed Molecular Weight:

461.44

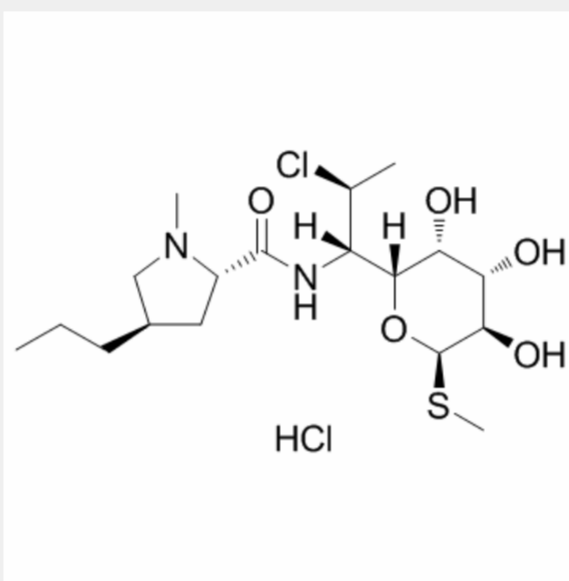
Product Description

Clindamycin (hydrochloride) is a semisynthetic lincosamide antibiotic, which inhibits protein synthesis by acting on the **50S ribosomal**.

In Vitro:

Clindamycin is a classical inhibitor of bacterial protein synthesis, by binding to the 23S ribosomal RNA of the 50S ribosomal subunit^[1].

In Vivo: Clindamycin hydrochloride results in fast absorption after oral administration in dogs, with a mean absorption time (MAT) of 0.87 hour, and bioavailability is 72.55%. Clindamycin hydrochloride results in total clearance (CL) of Clindamycin after both IV and oral administration (0.503 vs. 0.458 L/h/kg) in dogs. Clindamycin hydrochloride results in volume of distribution at steady-state (IV) at 2.48 L/kg, indicating a wide distribution of clindamycin in body fluids and tissues. Clindamycin serum concentrations after IV and oral administration remain above 0.5 µg/mL approximately for 10 hours^[1]. Clindamycin hydrochloride significantly reduces oral malodor from the dogs' baseline levels through 42 days. Clindamycin hydrochloride also results in significant reductions in dental plaque, dental calculus, and gingival bleeding in dogs^[2]. Clindamycin hydrochloride (2.5 mg/Lb), after ultrasonic scaling, root planing, and polishing (USRP), has a significant effect on plaque and pocket depth measures of periodontal disease but not on gingivitis in canine^[3]. Clindamycin hydrochloride results in complete remission ratio of 71.4% (15/21) in dogs with canine superficial bacterial pyoderma after treat within 14 to 28 days^[4].



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