

# Chloramphenicol

Catalog No: tcsc2207



## Available Sizes

Size: 1g

Size: 5g



## Specifications

**CAS No:**

56-75-7

**Formula:**

$C_{11}H_{12}Cl_2N_2O_5$

**Pathway:**

Anti-infection

**Target:**

Bacterial

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 150$  mg/mL (464.21 mM)

**Observed Molecular Weight:**

323.13

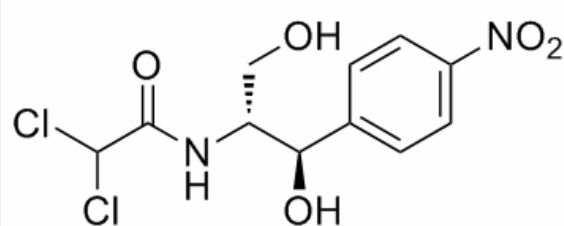
## Product Description

Chloramphenicol is a broad-spectrum antibiotic.

Target: Antibacterial

Chloramphenicol is a bacteriostatic drug that stops bacterial growth by inhibiting protein synthesis. Chloramphenicol prevents protein chain elongation by inhibiting the peptidyl transferase activity of the bacterial ribosome. It specifically binds to A2451 and

A2452 residues in the 23S rRNA of the 50S ribosomal subunit, preventing peptide bond formation. While chloramphenicol and the macrolide class of antibiotics both interact with ribosomes, chloramphenicol is not a macrolide. It directly interferes with substrate binding, whereas macrolides sterically block the progression of the growing peptide [1, 2].



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