

# Flumequine

Catalog No: tcsc2747



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

42835-25-6

**Formula:**

$C_{14}H_{12}FNO_3$

**Pathway:**

Cell Cycle/DNA Damage;Anti-infection

**Target:**

Topoisomerase;Bacterial

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 7.69 mg/mL (29.44 mM; Need ultrasonic)

**Alternative Names:**

R-802

**Observed Molecular Weight:**

261.25

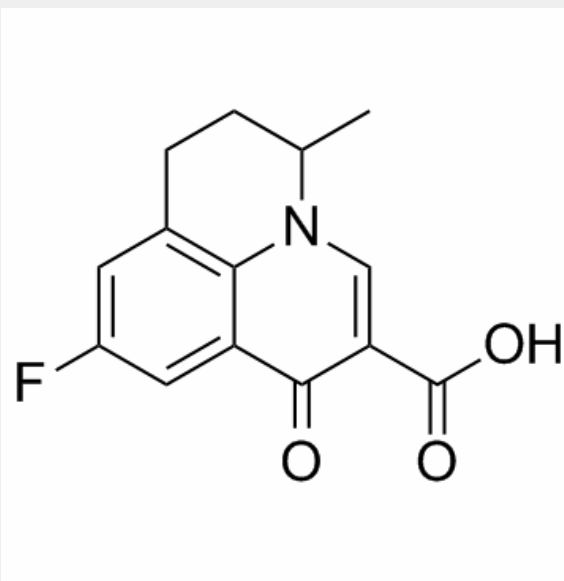
## Product Description

Flumequine is a quinolone antibiotic, and acts as a **topoisomerase II** inhibitor, with an **IC<sub>50</sub>** of 15  $\mu$ M (3.92  $\mu$ g/mL).

IC50 & Target: IC50: 15  $\mu$ M (Topoisomerase II)<sup>[1]</sup>

**In Vitro:** Flumequine is a topoisomerase II inhibitor, with an IC<sub>50</sub> of 3.92  $\mu$ g/mL, and less potently inhibits Gyrase, with an IC<sub>50</sub> of 1764  $\mu$ g/mL. Flumequine (0-625  $\mu$ g/mL) increases migration of nuclear DNA from CHL cells<sup>[1]</sup>. Flumequine inhibits Spanish field isolates of *B. hyodysenteriae* with MIC<sub>50</sub> and MIC<sub>90</sub> of 50 and 100  $\mu$ g/mL, and MBC<sub>50</sub> and MBC<sub>90</sub> of 50, 200  $\mu$ g/mL, respectively<sup>[2]</sup>. Flumequine suppresses *A. salmonicida* isolates with MIC ranging from 0.06 to 32  $\mu$ g/mL<sup>[3]</sup>.

**In Vivo:** Flumequine (0-500 mg/kg, p.o.) causes dose-related DNA damage in the stomach, colon, and urinary bladder of mice, 1 and 3 h but not 24 h after its administration<sup>[1]</sup>.



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