

# Irinotecan (hydrochloride trihydrate)

Catalog No: tcsc1139



## Available Sizes

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg



## Specifications

**CAS No:**

136572-09-3

**Formula:**

$C_{33}H_{45}ClN_4O_9$

**Pathway:**

Cell Cycle/DNA Damage;Autophagy

**Target:**

Topoisomerase;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O : 1.52 mg/mL (2.24 mM; Need ultrasonic and warming); DMSO : 50 mg/mL (73.84 mM; Need ultrasonic)

**Observed Molecular Weight:**

677.18

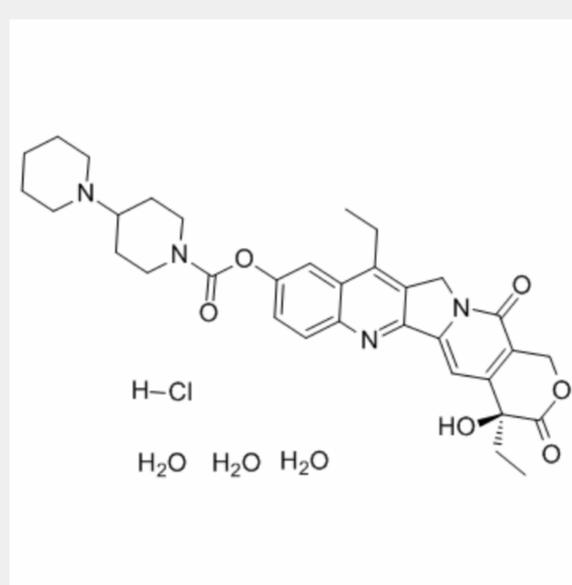
## Product Description

Irinotecan hydrochloride trihydrate is a water soluble **topoisomerase I** inhibitor with antitumor activity.

IC50 & Target: Topoisomerase I<sup>[1]</sup>

**In Vitro:** Irinotecan hydrochloride trihydrate is a topoisomerase I inhibitor. Irinotecan inhibits the growth of LoVo and HT-29 cells, with IC<sub>50</sub>s of 15.8 ± 5.1 and 5.17 ± 1.4 μM, respectively, and induces similar amounts of cleavable complexes in both in LoVo and HT-29 cells<sup>[2]</sup>. Irinotecan suppresses the proliferation of human umbilical vein endothelial cells (HUVEC), with an IC<sub>50</sub> of 1.3 μM<sup>[3]</sup>.

**In Vivo:** Irinotecan (CPT-11, 5 mg/kg) significantly inhibits the growth of tumors by intratumoral injection daily for 5 days, on two consecutive weeks in rats, and such effects also occur via continuous intraperitoneal infusion by osmotic minipump into mice. However, Irinotecan (10 mg/kg) shows no effect on the growth of tumor by i.p.<sup>[1]</sup>. Irinotecan (CPT-11, 100-300 mg/kg, i.p.) apparently suppresses tumor growth of HT-29 xenografts in athymic female mice by day 21. The two groups of Irinotecan (125 mg/kg) plus TSP-1 (10 mg/kg per day) or Irinotecan (150 mg/kg) in combination TSP-1 (20 mg/kg per day) are nearly equally effective and inhibit tumor growth 84% and 89%, respectively, and both are more effective than Irinotecan alone at doses of 250 and 300 mg/kg<sup>[3]</sup>.



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