

# Irinotecan (hydrochloride)

Catalog No: tcsc2988



## Available Sizes

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg



## Specifications

**CAS No:**

100286-90-6

**Formula:**

$C_{33}H_{39}ClN_4O_6$

**Pathway:**

Cell Cycle/DNA Damage;Autophagy

**Target:**

Topoisomerase;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq$  51 mg/mL (81.84 mM)

**Storage Instruction:**

4°C

**Alternative Names:**

CPT-11 hydrochloride;Camptothecin 11 hydrochloride

### Observed Molecular Weight:

623.14

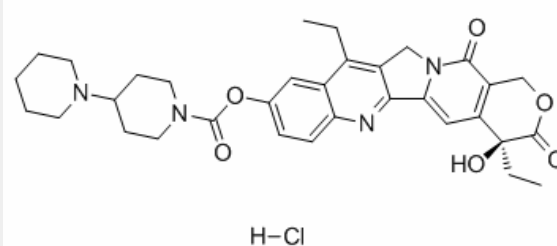
## Product Description

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

IC<sub>50</sub> & Target: Topoisomerase I<sup>[1]</sup>

**In Vitro:** Irinotecan hydrochloride is a topoisomerase I inhibitor. Irinotecan inhibits the growth of LoVo and HT-29 cells, with IC<sub>50</sub>s of  $15.8 \pm 5.1$  and  $5.17 \pm 1.4$   $\mu$ M, 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  $\mu$ M<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!