

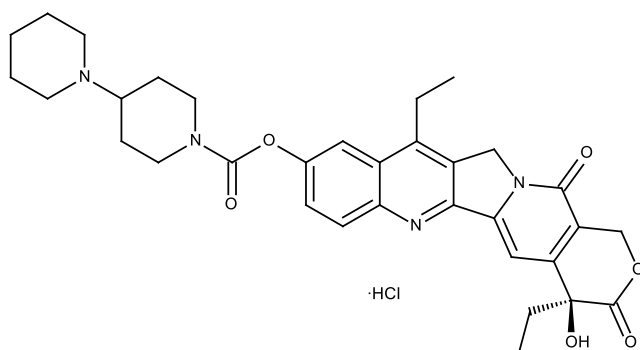
**Catalog # 10-2146**

**Irinotecan HCl**

(S)-4,11-Diethyl-3,4,12,14-tetrahydro-4-hydroxy-3,14-dioxo-1H-pyrano[3',4':6,7]-indolizino[1,2-b]quinolin-9-yl-[1,4'-bipiperidine]-1'-carboxylate hydrochloride

CAS# 100286-90-6

Lot # X102114



Irinotecan is a semi-synthetic derivative of camptothecin that is an FDA approved anticancer drug. It is a prodrug that is converted by tissue esterases to 7-ethyl-10-hydroxycamptothecin (SN-38), a potent inhibitor of DNA topoisomerase I.<sup>1,2</sup> Although irinotecan is also a topoisomerase inhibitor, SN-38 is approximately 1000 times as potent in purified enzyme studies. *In vitro* cytotoxicity assays show much greater variability in potency between the two (2-2000 fold).<sup>3</sup>

- 1) Kunimoto et al., (1987) *Antitumor activity of 7-ethyl-10-[4-(1-piperidino)-1-piperidino]carbonyloxy-camptothecin, a novel water-soluble derivative of camptothecin against murine tumors*; *Cancer Res.* **47** 5944
- 2) Mathijssen et al., (2002) *Pharmacology of topoisomerase I inhibitors irinotecan (CPT-11) and topotecan*; *Curr.Cancer Drug Targets* **253** 5892
- 3) Pfizer drug insert

**PHYSICAL DATA**

Molecular Weight:	623.14
Molecular Formula:	C <sub>33</sub> H <sub>38</sub> N <sub>4</sub> O <sub>6</sub> ·HCl
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (at least 50 mg/ml); ethanol (up to 4 mg/mL); water (up to 4 mg/mL)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO, ethanol or water may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**