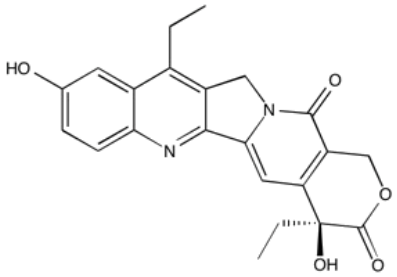
Catalog # 10-2425

SN-38

86639-52-3

7-Ethyl-10-hydroxycamptothecin

Lot # X101232



Active metabolite of the prodrug irinotecan that inhibits DNA topoisomerase I (IC_{50}= 0.74 and 1.9 µM for P388 and Ehrlich cells respectively)[1]. Inhibits DNA and RNA synthesis (IC_{50} = 0.077 and 1.3 µM respectively) but does not affect protein synthesis[2]. Displays potent antitumor activity in the low nM range against a variety of human tumor cell lines[2]. Low dose SN-38 increases FOXO3 nuclear localization, downregulates the expression of cancer-stemness markers and may reprogram ovarian and breast cancer cells into non-cancerous cells[3].

1) Kawato *et al*. (1991), *Intracellular roles of SN-38, a metabolite of the camptothecin derivative CPT-11, in the antitumor effect of CPT-11*; Cancer Res., **51** 4187
2) Gao *et al*. (2005), *Synthesis and antitumor activity of the hexacyclic camptothecin derivatives*; Bioorg. Med. Chem. Lett., **15** 3233
3) Hu *et al*. (2014), *Reprogramming ovarian and breast cancer cells into non-cancerous cells by low-dose metformin or SN-38 through FOXO activation*; Sci. Rep., **4** 5810

PHYSICAL DATA

Molecular Weight:	392.41
Molecular Formula:	$C_{22}H_{20}N_2O_5$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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