# **PRODUCT** INFORMATION



7-ethyl Camptothecin

Item No. 34607

CAS Registry No.:	78287-27-1
Formal Name:	(4S)-4,11-diethyl-4-hydroxy-1H-pyrano[3',4':6,7]
	indolizino[1,2-b]quinoline-3,14(4H,12H)-dione
Synonym:	SN-22
MF:	$C_{22}H_{20}N_2O_4$
FW:	376.4
Purity:	≥98%
UV/Vis.:	λ <sub>max</sub> : 220, 254, 359 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

## Laboratory Procedures

7-ethyl Camptothecin is supplied as a solid. A stock solution may be made by dissolving the 7-ethyl camptothecin in the solvent of choice, which should be purged with an inert gas. 7-ethyl Camptothecin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 7-ethyl camptothecin in these solvents is approximately 1 mg/ml.

## Description

7-ethyl Camptothecin is a derivative of camptothecin (Item No. 11694) and an anticancer agent.<sup>1,2</sup> It inhibits wild-type but not Gly533 mutant topoisomerase I in RPMI-8402 and CPT-K5 cells, respectively ( $IC_{50}s = 5.48$  and >2,500 nM, respectively).<sup>1</sup> 7-ethyl Camptothecin is cytotoxic to ADJ/PC6 SN-38-sensitive and PC6/SN2-5H2 SN-38-resistant cells (IC<sub>50</sub>s = 0.85 and 2.98 nM, respectively). In vivo, 7-ethyl camptothecin (0.25-3 mg/kg per day) increases survival in Ehrlich, MM46, Meth A, L1210, P388, and B16/F10 mouse ascites tumor models.<sup>2</sup>

## References

- 1. Yoshikawa, M., Ikegami, Y., Hayasaka, S., et al. Novel camptothecin analogues that circumvent ABCG2associated drug resistance in human tumor cells. Int. J. Cancer 110(6), 921-927 (2004).
- 2. Kunimoto, T., Nitta, K., Tanaka, T., et al. Antitumor activity of a new camptothecin derivative, SN-22, against various murine tumors. J. Pharmacobiodyn. 10(3), 148-151 (1987).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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