

 Phone:
 888-558-5227

 651-644-8424

 Fax:
 888-558-7329

 Email:
 getinfo@lktlabs.com

 Web:
 lktlabs.com

Product Information

	97682-44-5		
Chemical Name	[1,4'-Bipiperidine]-1'-carboxylic acid (4S)-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 ester	N N	
Synonym			
Formula	C ₃₃ H ₃₈ N ₄ O ₆		
Formula Wt.	586.68		
Melting Point	Bulk quanitites available upon request		
Purity	≥ 98 %	Product ID	Size
Solubility	Insoluble in water. Soluble	16932	5 mg
	in DMSO	16932	10 mg
		16932	25 mg
Store Temp	4°C	16932	100 mg
Ship Temp	Ambient	16932	250 mg
Description	Irinotecan is an analog of camptothecin that is used clinically to treat colon and ovarian cancers, among others. Irinotecan exhibits anticancer chemotherapeutic, anti-angiogenic, and immunosuppressive activities. Irinotecan inhibits DNA topoisomerase I and sensitizes tumors to the effects of radiation. In glioma models, irinotecan decreases the number of tumor vessels and decreases expression of VEGF and HIF-1α, inhibiting tumor growth. Irinotecan also moderates inhibition of dendritic cell differentiation and may produce cholinergic side effects, suggesting potential inhibition of acetylcholinesterase (AChE) as well.		

References Hu J, Kinn J, Zirakzadeh AA, et al. The effects of chemotherapeutic drugs on human monocyte-derived dendritic cell differentiation and antigen presentation. Clin Exp Immunol. 2013 Jun;172(3):490-9. PMID: 23600838.

Pan P, Li Y, Yu H, et al. Molecular principle of topotecan resistance by topoisomerase I mutations through molecular modeling approaches. J Chem Inf Model. 2013 Apr 22;53(4):997-1006. PMID: 23521602.

Chen AY, Chen PM, Chen YJ. DNA topoisomerase I drugs and radiotherapy for lung cancer. J Thorac Dis. 2012 Aug;4(4):390-7. PMID: 22934142.

Chintala S, Tóth K, Cao S, et al. Se-methylselenocysteine sensitizes hypoxic tumor cells to irinotecan by targeting hypoxia-inducible factor 1alpha. Cancer Chemother Pharmacol. 2010 Oct;66(5):899-911. PMID: 20066420.

Dodds HM, Rivory LP. The mechanism for the inhibition of acetylcholinesterases by irinotecan (CPT-11). Mol Pharmacol. 1999 Dec;56(6):1346-53. PMID: 10570064.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.