



Product Information

Topoisomerase inhibitor, Rubitecan, Purity $\geq 98\%$

Cat. No.: X24-08-YM073

Size: 10 mg; 25 mg; 50 mg; 100 mg

MDL: MFCD06656294

CAS Number: 91421-42-0

Compound CID: 472335

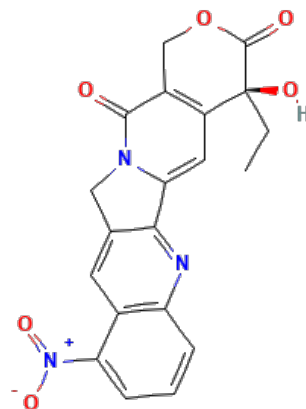
Synonym: 91421-42-0; RFS 2000; RFS2000; RFS-2000; 9-Nitrocamptothecin;

(19S

)-19-Ethyl-19-hydroxy-8-nitro-17-oxa-3,13-diazapentacyclo[11.8.0.02,11.04,9.015,20]

henicosa-1(21),2,4(9),5,7,10,15(20)-heptaene-14,18-dione

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	Rubitecan, soluble in DMSO and insoluble in water and ethanol, is an effective DNA damage inhibitor, that has the ability to prevent the pathway of DNA damage by inhibiting topoisomerase.
Molecular Weight	393.35
Molecular Formula	C ₂₀ H ₁₅ N ₃ O ₆
IUPAC Name	(19S)-19-Ethyl-19-hydroxy-8-nitro-17-oxa-3,13-diazapentacyclo[11.8.0.02,11.04,9.015,20]henicosa-1(21),2,4(9),5,7,10,15(20)-heptaene-14,18-dione
InChI	InChI=1S/C20H15N3O6/c1-2-20(26)13-7-16-17-10(8-22(16)18(24)12(13)9-29-19(20)25)6-11-14(21-17)4-3-5-15(11)23(27)28/h3-7,26H,2,8-9H2,1H3/t20-/m0/s1
InChI Key	VHXNKPBCCMUMSW-FQEVSTJZSA-N
Canonical SMILES	CCC1(C2=C(COC1=O)C(=O)N3CC4=CC5=C(C=CC=C5[N+](=O)[O-])N=C4C3=C2)O
Isomeric SMILES	CC[C@@]1(C2=C(COC1=O)C(=O)N3CC4=CC5=C(C=CC=C5[N+](=O)[O-])N=C4C3=C2)O
Form	Lyophilized powder
Purity	$\geq 98\%$
Titer	Free from inappropriate visible particulates, foreign matter, discoloration, or other defects
Solubility	<i>In vitro</i> : DMSO: 51 mg/mL (129.65 mM); Water: insoluble; Ethanol: insoluble
Stability	In its lyophilized form, the chemical remains stable for 36 months.
Quality Level	Research grade



Applications

Rubitecan is a DNA damage inhibitor that plays a key role in stabilizing the topoisomerase I-DNA complex, leading to DNA damage and cell death.

Storage

Store at -20°C, and keep desiccated.
