

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-11-23 11:28:04  
 Date of Next Testing: 2027-11-22 11:28:04  
 Product Name: **(S)-(+)-Camptothecin**  
 CAS Number: 7689-03-4  
 Specifications & Purity: 97%  
 Lot #: K2320342  
 SKU #: **C111282**  
**Analysis: 267643**  
 Storage Temperature: Store at 2-8°C

Parameter	Limit Values	Result
Nitrogen by Elemental Analysis	7.4-8.3 (%)	8.07%
Purity(HPLC)	97-100 (%)	99.03300%
Carbon by Elemental Analysis	66.5-70.3 (%)	68.73%
Specific Rotation [α] <sub>20</sub> /D(c=0.2 in CHCl <sub>3</sub> :MeOH=8:2)	37-45 (°)	44.97000°
Appearance (C111282)	Light yellow to brown powder or crystals or solid	Light yellow to brown powder or crystals or solid
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in CHCl <sub>3</sub> /MeOH (4/1): Faint Yellow to Dark Brown, Clear to Hazy, 2mg/ml	Pass	Pass



John Su  
QA & QC Manager