

Product Name: Etoposide

Catalog No.: 1226 **Batch No.:** 4

CAS Number: 33419-42-0

EC Number: 251-509-1

IUPAC Name: [5*R*-[5 α ,5 $\alpha\beta$,8 α ,9 β (*R*^{*})]]-9-[(4,6-*O*-Ethylidene- α -D-glucopyransoyl)oxy]-5,8,8 α ,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-*d*]-1,3-dioxol-6-(5*aH*)-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₉H₃₂O₁₃·H₂O

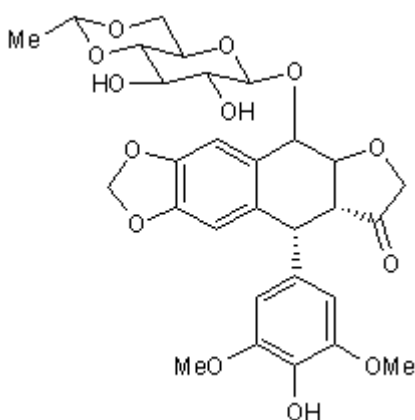
Batch Molecular Weight: 606.58

Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: [α]_D = -117 (Concentration = 0.6, Solvent = Chloroform)

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 57.42 5.65

Found 57.36 5.59

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Etoposide

Catalog No.: 1226 **Batch No.: 4**

CAS Number: 33419-42-0

EC Number: 251-509-1

IUPAC Name: [5*R*-[5 α ,5 β ,8 α ,9 β (*R*^{*})]]-9-[(4,6-*O*-Ethylidene- α -D-glucopyransoyl)oxy]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)furo[3',4':6,7]napho[2,3-*d*]-1,3-dioxol-6-(5*aH*)-one

Description:

Topoisomerase II inhibitor (IC₅₀ = 59.2 μ M).

Physical and Chemical Properties:

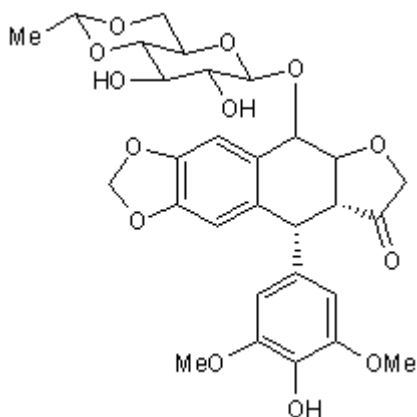
Batch Molecular Formula: C₂₉H₃₂O₁₃·H₂O

Batch Molecular Weight: 606.58

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Terada et al (1993) Antitumor agents.3.Synthesis and biological activity of 4 β -alkyl derivatives containing hydroxy, amino, and amido groups of 4'-*O*-demethyl-4-desoxypodophyllotoxin as antitumor agents. *J.Med.Chem.* **36** 1689. PMID: 8389875.

Burden et al (1996) Topoisomerase II.etoposide interactions direct the formation of drug-induced enzyme-DNA cleavage complexes. *J.Biol.Chem.* **271** 29238. PMID: 8910583.

Hande et al (1998) Etoposide: four decades of development of a topoisomerase II inhibitor. *Eur.J.Cancer* **34** 1514. PMID: 9893622.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use