

# Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** CKD 602

**Catalog No.:** 5125

**Batch No.:** 1

**IUPAC Name:** (4S)-4-Ethyl-4-hydroxy-11-[2-[(1-methylethyl)amino]ethyl]-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14 (4H,12H)dione phosphate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{25}H_{27}N_3O_4 \cdot H_3PO_4 \cdot 2\frac{1}{2}H_2O$

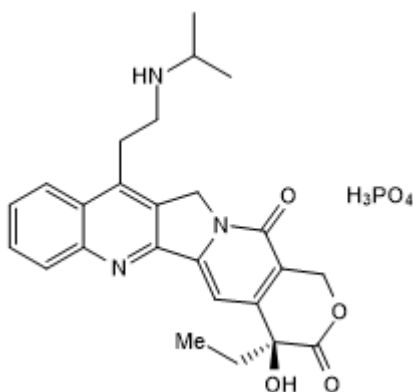
**Batch Molecular Weight:** 576.53

**Physical Appearance:** White solid

**Solubility:** water to 20 mM  
DMSO to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.5% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

Microanalysis:	Carbon	Hydrogen	Nitrogen	Phosphorus
Theoretical	52.09	6.12	7.29	5.37
Found	52.09	5.78	7.21	5.54

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

## Product Information

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### Description:

Topoisomerase I inhibitor. Forms stable DNA-topoisomerase complexes during DNA replication and induces cell cycle arrest in the G<sub>2</sub>/M phase. Inhibits growth of a range of cancer cell lines in vitro, as well as of ovarian and leukemia tumors in vivo.

### Physical and Chemical Properties:

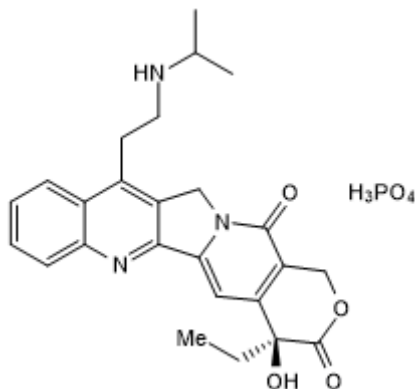
Batch Molecular Formula: C<sub>25</sub>H<sub>27</sub>N<sub>3</sub>O<sub>4</sub>·H<sub>3</sub>PO<sub>4</sub>·2½H<sub>2</sub>O

Batch Molecular Weight: 576.53

Physical Appearance: White solid

**Minimum Purity:** >98%

### Batch Molecular Structure:



**Storage:** Store at -20°C

### Solubility & Usage Info:

water to 20 mM

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:

**Kim et al** (2015) Anticancer effects of CKD-602 (Camtobell®) via G<sub>2</sub>/M phase arrest in oral squamous cell carcinoma cell lines. *Oncol.Lett.* **9** 136. PMID: 25435947.

**Jung et al** (2006) The synergism between Belotecan and cisplatin in gastric cancer. *Cancer Res.Treat.* **38** 159. PMID: 19771277.

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