

**Product Name:** CGP 74514 dihydrochloride

**Catalog No.:** 5472

**Batch No.:** 1

**IUPAC Name:** *rel*-N<sup>2</sup>-[(1*R*,2*S*)-2-Aminocyclohexyl]-N<sup>6</sup>-(3-chlorophenyl)-9-ethyl-9*H*-purine-2,6-diamine dihydrochloride

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>19</sub>H<sub>24</sub>ClN<sub>7</sub>·2HCl·1½H<sub>2</sub>O

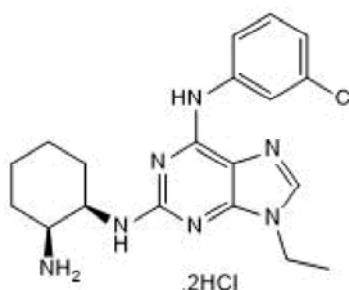
**Batch Molecular Weight:** 485.84

**Physical Appearance:** Off White solid

**Solubility:** water to 50 mM  
DMSO to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



(and enantiomer)

**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.37 (Dichloromethane:Methanol:Ammonia soln. [89:10:0.1])

**HPLC:** Shows 98.8% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	46.97	6.02	20.18
Found	46.78	5.71	19.93

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

**Product Name:** CGP 74514 dihydrochloride

**Catalog No.:** 5472

**Batch No.:** 1

**IUPAC Name:** *rel-N*<sup>2</sup>-[(1*R*,2*S*)-2-Aminocyclohexyl]-*N*<sup>6</sup>-(3-chlorophenyl)-9-ethyl-9*H*-purine-2,6-diamine dihydrochloride

**Description:**

CGP 74514 dihydrochloride is a potent cdk1 inhibitor (IC<sub>50</sub> = 25 nM). Reduces Akt phosphorylation and increases mitochondrial damage in leukemia cells in vitro in combination with LY 294002.

**Physical and Chemical Properties:**

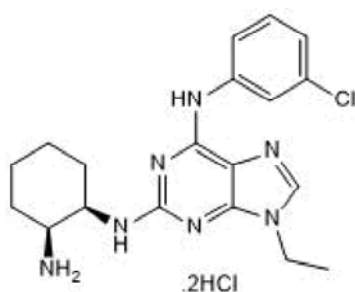
Batch Molecular Formula: C<sub>19</sub>H<sub>24</sub>ClN<sub>7</sub>.2HCl.1½H<sub>2</sub>O

Batch Molecular Weight: 485.84

Physical Appearance: Off White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



(and enantiomer)

**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 50 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:**

Yu *et al* (2013) The lethal effects of pharmacological cyclin-dependent kinase inhibitors in human leukemia cells proceed through a phosphatidylinositol 3-kinase/Akt-dependent process. *Cancer Res.* **63** 1822. PMID: 12702569.

Furet *et al* (2000) Structure-based design of potent CDK1 inhibitors derived from olomoucine. *J.Comput.Aided Mol.Des.* **14** 403. PMID: 10896313.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956