

Product Name: CKI 7 dihydrochloride

Catalog No.: 5329

Batch No.: 4

CAS Number: 1177141-67-1

IUPAC Name: *N*-(2-Aminoethyl)-5-chloro-8-isoquinolinesulfonamide dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₁₂ClN₃O₂S.2HCl.

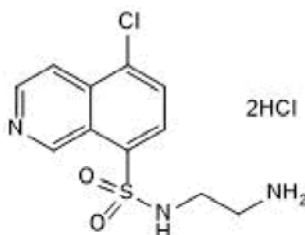
Batch Molecular Weight: 358.67

Physical Appearance: White solid

Solubility: water to 10 mM
DMSO to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	36.84	3.93	11.72	29.65
Found	36.67	3.93	11.62	29.64

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

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Description:

CKI 7 dihydrochloride is a casein kinase 1 (CK1) inhibitor. Also inhibits SGK, S6K1 and MSK1. Induces retinal cell differentiation from human ESCs and iPSCs in combination with SB 431542 (Cat. No. 1614) and Y-27632 (Cat. No. 1254).

Physical and Chemical Properties:

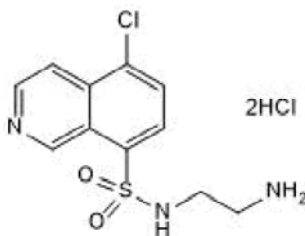
Batch Molecular Formula: C₁₁H₁₂ClN₃O₂S.2HCl.

Batch Molecular Weight: 358.67

Physical Appearance: White solid

Minimum Purity: ≥99%

Batch Molecular Structure:



References:

Osakada *et al* (2009) In vitro differentiation of retinal cells from human pluripotent stem cells by small-molecule induction. *J.Cell Sci.* **122** 3169. PMID: 19671662.

Peifer *et al* (2009) 3,4-Diaryl-isoxazoles and -imidazoles as potent dual inhibitors of p38α mitogen activated protein kinase and casein kinase 1δ. *J.Med.Chem.* **52** 7618. PMID: 19591487.

Rena *et al* (2004) D4476, a cell-permeant inhibitor of CK1, suppresses the site-specific phosphorylation and nuclear exclusion of FOXO1a. *EMBO Rep.* **5** 60. PMID: 14710188.

Storage: Store at -20°C

Solubility & Usage Info:

water to 10 mM

DMSO to 50 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.

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