

**Product Name:** TC-S 7004

**Catalog No.:** 5088

**Batch No.:** 1

CAS Number: 1386979-55-0

IUPAC Name: *N*-[2-Chloro-5-[[[(3-chlorophenyl)methyl]amino]carbonyl]phenyl]-7,8-dihydro-2-methoxy-7-oxopyrido[2,3-*d*]pyrimidine-6-carboxamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>23</sub>H<sub>17</sub>Cl<sub>2</sub>N<sub>5</sub>O<sub>4</sub>.H<sub>2</sub>O

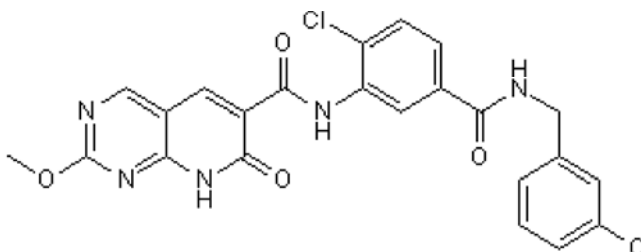
**Batch Molecular Weight:** 516.34

**Physical Appearance:** Off White solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.3% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	53.5	3.71	13.56
Found	53.22	3.67	13.5

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**Description:**

Potent and selective DYRK1A/B inhibitor (IC<sub>50</sub> values are 22 and 68 nM respectively). Selective for DYRK1A/B over a panel of other kinases. Reduces accumulation of quiescent Panc1 pancreatic cancer cells in G<sub>0</sub> under serum free conditions. Also induces DNA damage and apoptosis in quiescent Panc1 cells.

**Physical and Chemical Properties:**

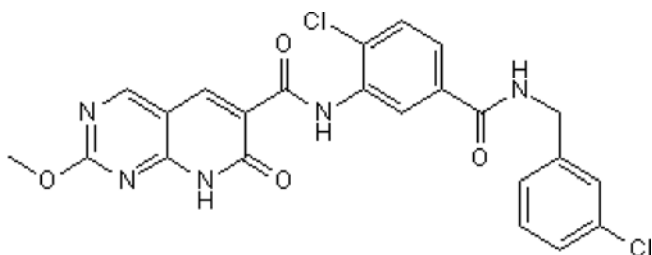
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Batch Molecular Weight: 516.34

Physical Appearance: Off White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**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:**

**Anderson et al** (2013) Pyrido[2,3-*d*]pyrimidines: discovery and preliminary SAR of a novel series of DYRK1B and DYRK1A inhibitors. *Bioorg.Med.Chem.Lett.* **15** 6610. PMID: 24239188.

**Ewton et al** (2011) Inactivation of mirk/dyrk1b kinase targets quiescent pancreatic cancer cells. *Mol.Cancer Ther.* **10** 2104. PMID: 21878655.

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