

**Product Name:** Pyridostatin pentahydrochloride

**Catalog No.:** 4763

**Batch No.:** 2

CAS Number: 1781882-65-2

IUPAC Name: 4-(2-Aminoethoxy)*N*<sup>2</sup>,*N*<sup>6</sup>-bis[4-(2-aminoethoxy)-2-quinolinyl]-2,6-pyridinecarboxamide pentahydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>31</sub>H<sub>32</sub>N<sub>8</sub>O<sub>5</sub>.5HCl

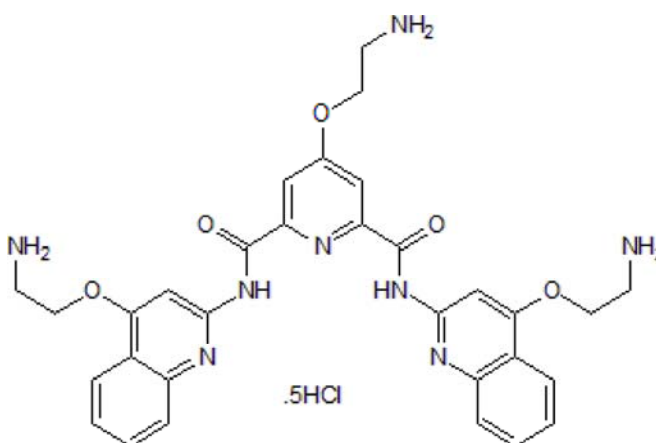
**Batch Molecular Weight:** 778.94

**Physical Appearance:** Off-white solid

**Solubility:** water to 20 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 94.9% purity

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

**Mass Spectrum:** Consistent with structure

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

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**Description:**

Binds and stabilizes G-quadruplexes, inducing DNA damage and cell cycle arrest ( $K_d = 490$  nM); targets the proto-oncogene Src, reducing Src protein abundance and Src-dependent motility in human breast cancer cells. Also targets telomeric G-quadruplexes, inducing telomerase dysfunction. Activates the DNA-dependent protein kinase catalytic subunit (DNA-PKcs).

**Physical and Chemical Properties:**

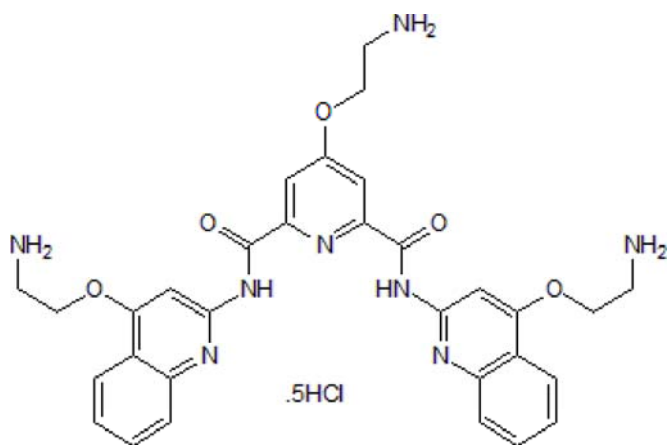
Batch Molecular Formula: C<sub>31</sub>H<sub>32</sub>N<sub>8</sub>O<sub>5</sub>.5HCl

Batch Molecular Weight: 778.94

Physical Appearance: Off-white solid

**Minimum Purity:** ≥95%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water to 20 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:**

**Rodriguez et al** (20112) Small-molecule-induced DNA damage identifies alternative DNA structures in human genes. *Nat.Chem.Biol.* **8** 301. PMID: 22306580.

**Koirala et al** (2011) A single-molecule platform for investigation of interactions between G-quadruplexes and small-molecule ligands. *Nat.Chem.* **3** 782. PMID: 21941250 .

**Müller et al** (2010) Small-molecule-mediated G-quadruplex isolation from human cells. *Nat.Chem.* **2** 1095. PMID: 21107376.

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