

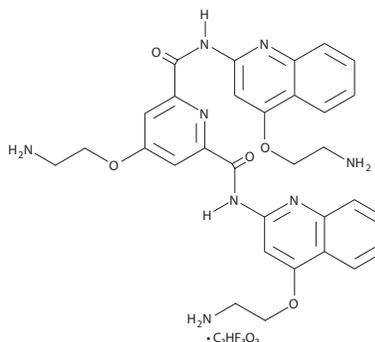
PRODUCT INFORMATION



Pyridostatin (trifluoroacetate salt)

Item No. 18013

CAS Registry No.: 1472611-44-1
Formal Name: 4-(2-aminoethoxy)-N²,N⁶-bis[4-(2-aminoethoxy)-2-quinolinyl]-2,6-pyridinedicarboxamide, trifluoroacetate salt
MF: C₃₁H₃₂N₈O₅ • C₂HF₃O₂
FW: 710.7
Purity: ≥95%
UV/Vis.: λ_{max}: 228, 269, 311, 324 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Pyridostatin (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the pyridostatin (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Pyridostatin (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of pyridostatin (trifluoroacetate salt) in these solvents is approximately 5, 20, and 30 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of pyridostatin (trifluoroacetate salt) can be prepared by directly dissolving the pyridostatin (trifluoroacetate salt) in aqueous buffers. The solubility of pyridostatin (trifluoroacetate salt) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Pyridostatin is a synthetic small-molecule stabilizer of G-quadruplexes, a secondary structure of DNA that usually exists in the end of the chromosome or the telomeres. It can compete for binding with the telomere-associated proteins and induce telomerase dysfunction. Pyridostatin induces DNA damage and cell cycle arrest (K_d = 490 nM) and has been shown to target the proto-oncogene *Src*, reducing *Src* protein abundance and *Src*-dependent motility in human breast cancer cells.¹

Reference

1. Rodriguez, R., Miller, K.M., Forment, J.V., *et al.* Small-molecule-induced DNA damage identifies alternative DNA structures in human genes. *Nat. Chem. Biol.* **8**(3), 301-310 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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