

Product Data Sheet

Product Name: Pyridostatin hydrochloride

Cat. No.: GC37043

Chemical Properties

Cas. No. 1781882-65-2

SMILES O=C(C1=CC(OCCN)=CC(C(NC2=NC3=C(C(OCCN)=C2)C=CC=C3)=O)=N1)NC4=CC(OCCN)=C5C=CC=CC5=N4.Cl.Cl.Cl.Cl.Cl

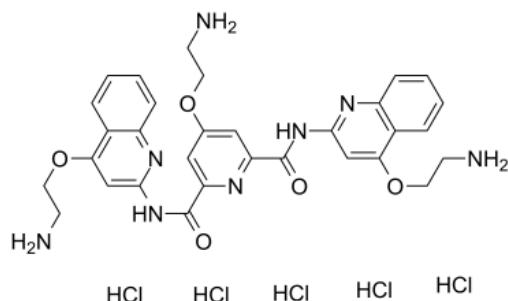
Formula $C_{31}H_{37}Cl_5N_8O_5$ M.Wt 778.94

Solubility Water: 50 mg/mL (64.19 mM) Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Pyridostatin hydrochloride is a G-quadruplexe stabilizer, with a K_d of 490 nM. K_d: 490 nM (G-quadruplexe)[1]

Pyridostatin hydrochloride is a G-quadruplexe stabilizer, with a K_d of 490 nM[1]. Pyridostatin (PDS) shows neurotoxic activity against primary cortical neurons at 0.01-5 μM, causes DNA double-strand breaks (DSBs) at 1 μM, downregulates BRCA1 in neurons at 1, 2 or 5 μM[2]. Pyridostatin interacts

Caution: Product has not been fully validated for medical applications. For research use only.

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with G-quadruplex motifs in SRC and alters mRNA levels of damaged genes[3].

- [1]. Koirala D, et al. A single-molecule platform for investigation of interactions between G-quadruplexes and small-molecule ligands. *Nat Chem*. 2011 Aug 28;3(10):782-7. [2]. Moruno-Manchon JF, et al. The G-quadruplex DNA stabilizing drug pyridostatin promotes DNA damage and downregulates transcription of Brca1 in neurons. *Aging (Albany NY)*. 2017 Sep 12;9(9):1957-1970. [3]. Rodriguez R, et al. Small-molecule-induced DNA damage identifies alternative DNA structures in human genes. *Nat Chem Biol*. 2012 Feb 5;8(3):301-10.

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