SignalChem
Specialists in Signaling Proteins
1-866-9 KINASE (54-6273)

Catalog #	Aliquot Size
S344-903-5	5 mg
S344-903-25	25 mg

BIX-01294 3HCl

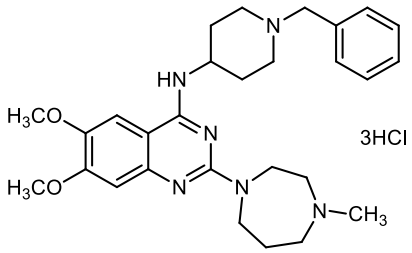
Epigenetic Enzyme Inhibitor

Catalog # S344-903
Lot # P3320-5
CAS # 935693-62-2

Product Description

Molecular Formula: $C_{28}H_{38}N_6O_2.3HCl$
Appearance: Off-white crystalline powder
Molecular Weight: 600.02
Purity: >98%; NMR (Conforms)
Solubilization: May be dissolved in water (50 mg/ml) or DMSO (50 mg/ml)

Molecular Structure



Alias

2-(Hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-6,7-dimethoxy-N-[1-(phenylmethyl)-4-piperidinyl]-4-quinazolinamine trihydrochloride

Specific Activity

Histone Methyl Transferase Inhibitor

Storage and Stability

Store desiccated as supplied at ambient for up to 2 years. Store solutions at -20°C for up to 3 months.

Scientific Background

BIX-01294 is a selective inhibitor of G9a histone methyltransferase (G9aHMTase; IC_{50} = 1.7 μM) as well as GLP HMTase (IC_{50} = 38 μM) leading to a decrease in H3K9Me2 (histone H3 lysine 9 methylation) in vitro[1]. It facilitates the reactivation of pluripotency genes and induces passive demethylation, thus promoting reprogramming[2]. BIX-01294, in combination with BAY K8644 (a calcium channel agonist), was found to improve reprogramming efficiencies of Oct4-Klf4-(OK)-infected neural progenitor cells[3]. It induced apoptosis and decreased proliferation, mobility and invasion in human neuroblastoma cells[4].

References

1. S Kubicek et al. Mol. Cell 2007 25:473
2. D Huangfu et al. Nat. Biotechnol. 2008 26:795
3. Y Shi et al. Cell Stem Cell 2008 2:525
4. Z Lu et al. Anticancer Drugs 2013 24:484

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To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
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