

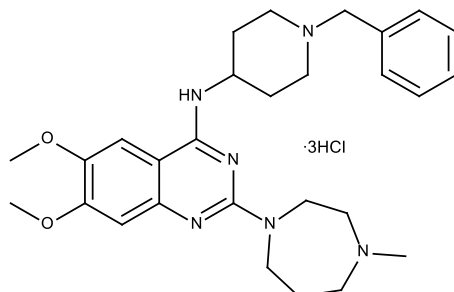


Catalog # 10-1335

BIX-01294

CAS# 935693-62-2

2-(Hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-6,7-dimethoxy-N-[1-(phenylmethyl)-4-piperidiny]-4-quinazolinamine trihydrochloride
Lot # X104097



BIX-01294 is a selective inhibitor of G9a histone methyltransferase (G9aHMTase; $IC_{50} = 1.7 \mu M$) as well as GLP HMTase ($IC_{50} = 38 \mu M$) leading to a decrease in H3K9me2(histone H3 lysine 9 methylation) *in vitro*.¹ Bix-01294 facilitates the reactivation of pluripotency genes and induces passive demethylation, thus promoting reprogramming. 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

- 1) Kubicek et al. (2007) *Reversal of H3K9me2 by a small-molecule inhibitor for the G9a histone methyltransferase* Mol. Cell. **25** 473
- 2) Huangfu et al. (2008) *Induction of pluripotent stem cells by defined factors is greatly improved by small-molecule compounds* Nat. Biotechnol. **26** 795
- 3) Shi Y et al., (2008) *A combined chemical and genetic approach for the generation of induced pluripotent stem cells*. Cell Stem Cell. **2** 525

PHYSICAL DATA

Molecular Weight:	600.03
Molecular Formula:	$C_{28}H_{38}N_6O_2 \cdot 3HCl$
Purity:	>98% (TLC)
Solubility:	Water (up to 50 mg/mL), DMSO (up to 50 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at room temperature for up to one year from the date of purchase. Solutions in DMSO or water may be stored at -20°C for up to 3 months

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