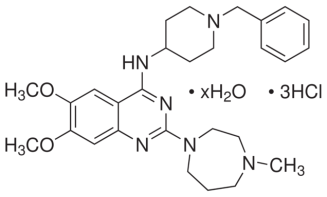
BIX-01294

Catalog Number P018-5MG

Catalog Number P018-25MG



ARBOR ASSAYS®

FEATURES

- Inhibtor of G9a and GLP HMTases
- Cell permeable
- Selectively impairs generation of H3K9me2

INTRODUCTION

BIX-01294, a diazepin-quinazolinamine derivative, is a selective, cell-permeable G9a-like protein and G9a histone lysine methyltransferase (HMTase) inhibitor (IC_{50} values are 0.7 and 1.7 µM respectively) that displays little or no activity at other HMTases. BIX-01294 has been used in combination with the calcium channel activator BayK8644 to facilitate the generation of induced pluripotent stem cells from somatic cells *in vitro*. BIX-01294 and valproic acid, a histone deacetylase (HDAC) inhibitor, may replace the requirement for ectopic OCT4 (POU5F1) and cMyc respectively in pluripotent stem cell induction (iPS) recipes.

FORM: Yellow solid

MOLECULAR WEIGHT: 600.02 (anhydrous)

STORAGE: Room temperature

FORMULA: $C_{28}H_{38}N_6O_2 \cdot 3HCl \cdot xH2O$

CAS NUMBER: 935693-62-2

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

USES: Soluble to 100 mM in water or DMSO.

REFERENCES:

Tachibana, M., et al. G9a histone methyltransferase plays a dominant role in euchromatic histone H3 lysine 9 methylation and is essential for early embryogenesis. Genes Dev. 16 1779-1791 (2002).

Wagschal, A., et al. G9a histone methyltransferase contributes to imprinting in the mouse placenta. Mol. Cell. Biol. 28:3, 1104-1113 (2008).

Thomas, L.R., et al. Functional analysis of histone methyltransferase G9a in B and T lymphocytes. J. Immunol. 181, 485-493 (2008)

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