

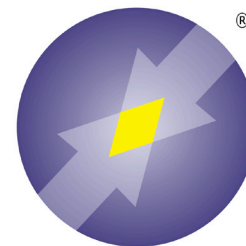
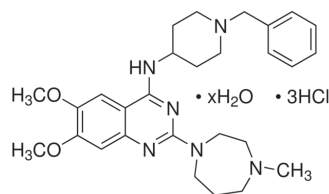
BIX-01294

Catalog Number P018-5MG

Catalog Number P018-25MG

FEATURES

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



ARBOR
ASSAYS

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 μ M 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: | $C_{28}H_{38}N_6O_2 \cdot 3HCl \cdot xH_2O$ |
| 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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