

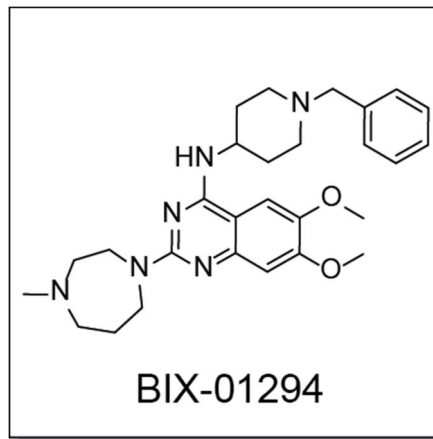


## Product Specification Sheet

**Product Name:** BIX-01294  
**Catalog Number:** C2491-5 (powder)  
C2491-5s (10 mM in DMSO)  
**Package Size:** 5 mg

**Technical information:**

**Chemical Formula:** C<sub>28</sub>H<sub>38</sub>N<sub>6</sub>O<sub>2</sub>  
**CAS #:** 935693-62-2  
**Molecular Weight:** 490.64  
**Purity:** >98%  
**Formulation:** Pale yellow solid  
**Solubility:** Soluble in DMSO up to 100 mM  
**Chemical Name:** 2-(Hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-6,7-dimethoxy-N-[1-(phenylmethyl)-4-piperidinyl]-4-quinazolinamine trihydrochloride hydrate  
**Storage:** Store solid powder at 4°C desiccated;  
Store DMSO solution at -20°C.



- Handling:**
- For C2491-5 (powder), add 1.02 mL of DMSO to make 10 mM solution.
  - For C2491-5s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full recovery of sample.

**Biological Activity:** BIX-01294 is a selective inhibitor of G9a histone methyl transferase (G9a HMTase) that impairs G9a HMTase and generation of H3K9me<sub>2</sub> in vitro. In its inhibition of the histone lysine methyltransferases, BIX-01294 does not compete with cofactor S-adenosyl-methionine. G9a HMTase regulates gene expression including one of the pluripotency genes Oct4.

It is reported that BIX-01294 enhances reprogramming efficiency of neural progenitor cells to the same levels as when four transcription factors (Oct4, Klf4, Sox2 and c-Myc) were introduced to somatic cells for generation of induced pluripotent stem cells.

- Reference:**
1. Kubicek, S. et al., Reversal of H3K9me<sub>2</sub> by a small-molecule inhibitor for the G9a histone methyltransferase Mol. Cell. 3rd ed., 25, 473-481, (2007).
  2. Shi, Y. et al. A combined chemical and genetic approach for the generation of induced pluripotent stem cells. Cell Stem Cell 2, 525-528, (2008).

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