

**Product Name:** BIX 01294

**Catalog No.:** 3364

**Batch No.:** 3

CAS Number: 1392399-03-9

IUPAC Name: 2-(Hexahydro-4-methyl-1*H*-1,4-diazepin-1-yl)-6,7-dimethoxy-*N*-[1-(phenylmethyl)-4-piperidiny]-4-quinazolinamine trihydrochloride

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>28</sub>H<sub>38</sub>N<sub>6</sub>O<sub>2</sub>·3HCl·4¼H<sub>2</sub>O

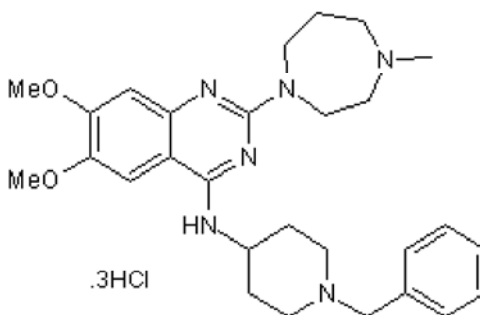
**Batch Molecular Weight:** 676.57

**Physical Appearance:** White solid

**Solubility:** water to 100 mM  
DMSO to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.9% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	49.71	7.37	12.42	15.72
Found	49.34	7.17	12.2	15.71

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**Description:**

BIX 01294 is a GLP and G9a histone lysine methyltransferase inhibitor (IC<sub>50</sub> values are 0.7 and 1.7 μM respectively) that displays no activity at other histone methyltransferases up to 37 μM. Modulates H3K9me2 levels in mammalian cells and potentiates induction of pluripotent stem cells from somatic cells in vitro. Also inhibits H3K36 methylation by oncoproteins NSD1, NSD2 and NSD3 (IC<sub>50</sub> values are 40 - 112 μM). Restores metabolic and antiviral function in exhausted CD8<sup>+</sup> T cells from patients with chronic HCV infection. For more information about how BIX 01294 trihydrochloride may be used, see our protocol: Converting Fibro... Please see product specific page on [www.tocris.com](http://www.tocris.com) for full description.

**Physical and Chemical Properties:**

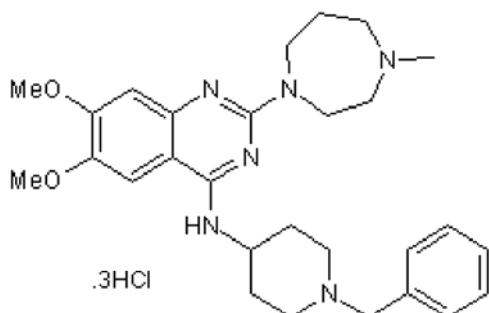
Batch Molecular Formula: C<sub>28</sub>H<sub>38</sub>N<sub>6</sub>O<sub>2</sub>·3HCl·4¼H<sub>2</sub>O

Batch Molecular Weight: 676.57

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Barili et al (2020)** Targeting p53 and histone methyltransferases restores exhausted CD8<sup>+</sup> T cells in HCV infection. *Nat.Commun.* **11** 604. PMID: 32001678.

**Morishita et al (2017)** BIX-01294 inhibits oncoproteins NSD1, NSD2, and NSD3. *Med.Chem.Res.* **26** 2038.

**Malmquist et al (2012)** Small-molecule histone methyltransferase inhibitors display rapid antimalarial activity against all blood stage forms in *Plasmodium falciparum*. *Proc.Natl.Acad.Sci.U.S.A.* **109** 16708. PMID: 23011794.

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