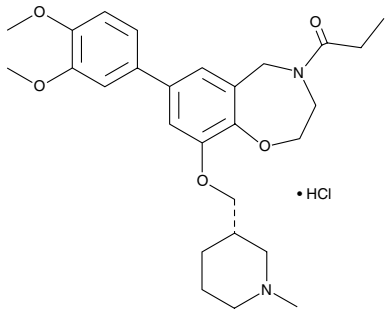
Product Information

I-CBP112 (hydrochloride)

Item No. 14468

Formal Name: (S)-1-(7-(3,4-dimethoxyphenyl)-9-((1-methylpiperidin-3-yl)methoxy)-2,3-dihydrobenzo[f][1,4]oxazepin-4(5H)-yl)propan-1-one, monohydrochloride
MF: $C_{27}H_{36}N_2O_5 \cdot HCl$
FW: 505.1
Purity: ≥90%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 213, 269, 291 nm



Laboratory Procedures

For long term storage, we suggest that I-CBP112 (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

I-CBP112 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the I-CBP112 (hydrochloride) in the solvent of choice. I-CBP112 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of I-CBP112 (hydrochloride) in these solvents is approximately 16 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of I-CBP112 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of I-CBP112 (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

cAMP-responsive element-binding protein binding protein (CREBBP) and E1A-associated protein p300 (EP300) are transcriptional co-activators that modulate DNA replication, DNA repair, cell growth, transformation, and development.[1,2] Both CBP and EP300 contain bromodomains, which mediate their binding to acetylated lysine residues on histones and other proteins.[3] I-CBP112 is a selective inhibitor of CBP and EP300 that directly binds their bromodomains (K_d = 0.142 and 0.625 µM). Developed by the Structural Genomics Consortium (http://www.thesgc.org/chemical-probes/ICBP112), this compound shows only weak cross-reactivity with the bromodomains of bromodomain and extra-terminal proteins and shows no interaction with other bromodomains.

References

1. Iyer, N.G., Özdag, H., and Caldas, C. p300/CBP and cancer. *Oncogene* **23**, 4225-4231 (2004).
2. Kalkhoven, E. CBP and p300: HATs for different occasions. *Biochem. Pharmacol.* **68**, 1145-1155 (2004).
3. Zeng, L., Zhang, Q., Gerona-Navarro, G., *et al.* Structural basis of site-specific histone recognition by the bromodomains of human coactivators PCAF and CBP/p300. *Structure* **16(4)**, 643-652 (2008).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14468

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com