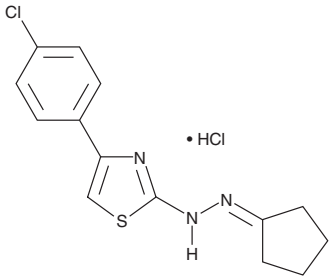
PRODUCT INFORMATION

CPTH2 (hydrochloride)

Item No. 12086

CAS Registry No.:	2108899-91-6
Formal Name:	2-[4-(4-chlorophenyl)-2-thiazolyl]hydrazone-cyclopentanone, monohydrochloride
MF:	$C_{14}H_{14}ClN_3S \bullet HCl$
FW:	328.3
Purity:	≥95%
UV/Vis.:	λ_{max}: 250, 280 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CPTH2 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the CPTH2 in the solvent of choice, which should be purged with an inert gas. CPTH2 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CPTH2 (hydrochloride) in ethanol and DMF is approximately 5 mg/ml and approximately 16 mg/ml in DMSO.

CPTH2 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CPTH2 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CPTH2 (hydrochloride) has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Gcn5 is a chromatin modifying factor whose HAT activity is required to acetylate histone H3 lysine 9 (K9) and K14, which facilitates transcription elongation by relaxing nucleosomes. CPTH2 inhibits the HAT activity of Gcn5 both *in vitro* and *in vivo*, reducing histone H3K14 acetylation at a concentration of 0.8 mM.[1] It is a useful tool to study the impact of Gcn5-dependent acetylation in various biological systems and recently has been used to control the replication of human adenovirus.[2]

References

1. Chimenti, F., Bizzarri, B., Maccioni, E., *et al.* A novel histone acetyltransferase inhibitor modulating Gcn5 network: Cyclopentylidene-[4-(4'-chlorophenyl)thiazol-2-yl)hydrazone. *J. Med. Chem.* **52(2)**, 530-536 (2009).
2. Ablack, J.N.G., Cohen, M., Thillainadesan, G., *et al.* Cellular GCN5 is a novel regulator of human adenovirus E1A-conserved region 3 transactivation. *J. Virol.* **86(15)**, 8198-8209 (2012).

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