

# **Data Sheet**

 Product Name:
 SGC-CBP30

 Cat. No.:
 CS-2096

 CAS No.:
 1613695-14-9

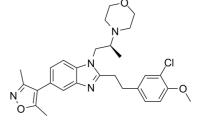
 Molecular Formula:
 C28H33CIN4O3

Molecular Weight: 509.04

Target: Epigenetic Reader Domain; Histone Acetyltransferase

Pathway: Epigenetics

Solubility: DMSO :  $\geq$  31 mg/mL (60.90 mM)



## **BIOLOGICAL ACTIVITY:**

SGC-CBP30 is a potent and highly selective CBP/p300 bromodomain (K<sub>d</sub>s of 21 nM and 32 nM for CBP and p300, respectively) inhibitor, displaying 40-fold selectivity over the first bromodomain of BRD4 [BRD4(1)] bound. SGC-CBP30 strongly reduces secretion of IL-17A in Th17 cells and has anti-inflammatory effects<sup>[1][2][3]</sup>. IC50 & Target: CBP/p300 bromodomain<sup>[1][3]</sup> In Vitro: In ankylosing spondylitis and psoriatic arthritis condition, SGC-CBP30 inhibits IL-17A secretion by Th17 cells. Transcriptional profiling of human T cells after SGC-CBP30 treatment shows a much more restricted effect on gene expression than that observed with the pan-BET (bromo and extraterminal domain protein family) bromodomain inhibitor JQ1<sup>[1]</sup>. In Vivo: SGC-CBP30 treatment slightly alleviates alveolar bronchial fibrosis induced by NSC-125066. SGC-CBP30 plus CQ-061 dramatically reduces alveolar bronchial fibrosis. The ELISA of cytokines IL-4 and IFN-γ in BALF demonstrates that combination of SGC-CBP300 and CQ-061 suppresses the activation of IL-4 as well as IFN-γ in NSC-125066 induced IPF murine models to nearly normal levels<sup>[2]</sup>.

#### References:

- [1]. Hammitzsch A, et al. CBP30, a selective CBP/p300 bromodomain inhibitor, suppresses human Th17 responses. Proc Natl Acad Sci U S A. 2015 Aug 25;112(34):10768-73.
- [2]. Tao J, Inhibition of EP300 and DDR1 synergistically alleviates pulmonary fibrosis in vitro and in vivo. Biomed Pharmacother. 2018 Oct;106:1727-1733.
- [3]. Hay DA, et al. Discovery and optimization of small-molecule ligands for the CBP/p300 bromodomains. J Am Chem Soc. 2014 Jul 2;136(26):9308-19.

#### **CAIndexNames**:

1H-Benzimidazole, 2-[2-(3-chloro-4-methoxyphenyl)ethyl]-5-(3,5-dimethyl-4-isoxazolyl)-1-[(2S)-2-(4-morpholinyl)propyl]-

### **SMILES:**

C[C@H](N1CCOCC1)CN2C(CCC3=CC=C(OC)C(CI)=C3)=NC4=CC(C5=C(C)ON=C5C)=CC=C42

Caution: Product has not been fully validated for medical applications. For research use only.

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