Product data sheet



MedKoo Cat#: 574743		∕ N/
Name: I-CBP112 hydrochloride		
CAS: 2147701-33-3		
Chemical Formula: C ₂₇ H ₃₇ ClN ₂ O ₅		Ų H−CI
Molecular Weight: 505.052		Ò
Product supplied as:	Powder	0
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	N,
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.	
	In solvent: -80°C 3 months; -20°C 2 weeks.	0, ~

1. Product description:

I-CBP112 hydrochlorideis a selective inhibitor of CBP and EP300 that directly binds their bromodomains.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMF	16.0	31.68
DMSO	16.0	31.68
Ethanol	16.0	31.68
PBS (pH 7.2)	10.0	19.80

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.98 mL	9.90 mL	19.80 mL
5 mM	0.40 mL	1.98 mL	3.96 mL
10 mM	0.20 mL	0.99 mL	1.98 mL
50 mM	0.04 mL	0.20 mL	0.40 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- 1. Strachowska M, Gronkowska K, Michlewska S, Robaszkiewicz A. CBP/p300 Bromodomain Inhibitor-I-CBP112 Declines Transcription of the Key ABC Transporters and Sensitizes Cancer Cells to Chemotherapy Drugs. Cancers (Basel). 2021 Sep 14;13(18):4614. doi: 10.3390/cancers13184614. PMID: 34572840; PMCID: PMC8467251.
- 2. Zucconi BE, Makofske JL, Meyers DJ, Hwang Y, Wu M, Kuroda MI, Cole PA. Combination Targeting of the Bromodomain and Acetyltransferase Active Site of p300/CBP. Biochemistry. 2019 Apr 23;58(16):2133-2143. doi: 10.1021/acs.biochem.9b00160. Epub 2019 Apr 11. PMID: 30924641; PMCID: PMC6948846.

In vivo study

TBD

7. Bioactivity

Biological target:

A p300 and CBP inhibitor.

In vitro activity

Product data sheet



The inhibition of this demethylase in the presence of I-CBP112 prevented the repression of ABCC1 and ABCC10 and, to a considerable extent, cancer cells' sensitization to drugs. In conclusion, the CBP/p300 bromodomain inhibitor I-CBP112 can be considered as a potent anti-multidrug-resistance agent, capable of repressing key ABC transporters responsible for drug efflux in various cancer types.

Reference: Cancers (Basel). 2021 Sep 14;13(18):4614. https://pubmed.ncbi.nlm.nih.gov/34572840/

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.