

Product Name: CB 5083

Catalog No.: 7379

Batch No.: 1

CAS Number: 1542705-92-9

IUPAC Name: 1-[7,8-Dihydro-4-[(phenylmethyl)amino]-5H-pyrano[4,3-*d*]pyrimidin-2-yl]-2-methyl-1H-indole-4-carboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₂₃N₅O₂·³/₄H₂O

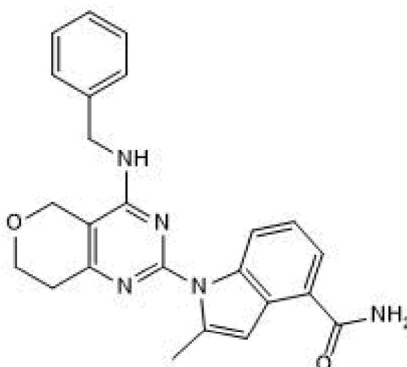
Batch Molecular Weight: 426.99

Physical Appearance: Light yellow solid

Solubility: DMSO to 100 mM
ethanol to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	67.51	5.78	16.4
Found	67.74	5.7	16.47

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Description:

CB 5083 is a potent p97 inhibitor, inhibiting the D2 ATPase domain (IC₅₀ = 11 nM). CB 5083 shows broad antitumor activity and inhibits tumor growth in vivo. CB 5083 is cytotoxic to A549 cancer cells (IC₅₀ = 680 nM) and reduces cell viability in a range of colorectal cancer cell lines. Increases CHOP and GRP78 protein levels, upregulates PD-L1 mRNA levels and results in the loss of aggresomes.

Physical and Chemical Properties:

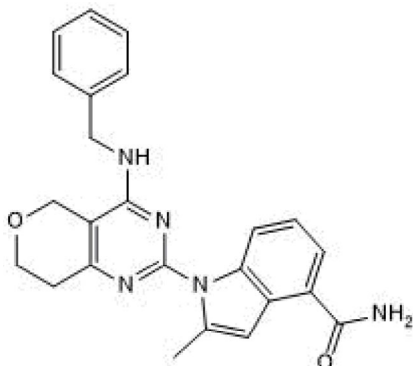
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Batch Molecular Weight: 426.99

Physical Appearance: Light yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM
ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Mukkavalli et al (2021) The p97-UBXN1 complex regulates aggresome formation. *J.Cell Sci.* **134**. PMID: 33712450.

Huryn et al (2019) p97: an emerging target for cancer, neurodegenerative diseases, and viral infections. *J.Med.Chem.* **63** 1892. PMID: 31550150.

Vekaria et al (2019) Functional cooperativity of p97 and histone deacetylase 6 in mediating DNA repair in mantle cell lymphoma cells. *Leukemia* **33** 1675. PMID: 30664664.

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