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TOCRIS

Print Date: May 28th 2026

Certificate of Analysis

www.tocris.com

Product Name: **CT-4** **Catalog No.: 8024** **Batch No.: 1**

CAS Number: 3057302-21-0

IUPAC Name: 3-((4-((8-((2-(2,6-Dioxopiperidin-3-yl)-1,3-dioxoisoindolin-4-yl)amino)octyl)carbamoyl)benzyl)oxy)-*N*-hydroxy-4-methoxybenzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{37}H_{41}N_5O_9.1¾H_2O$

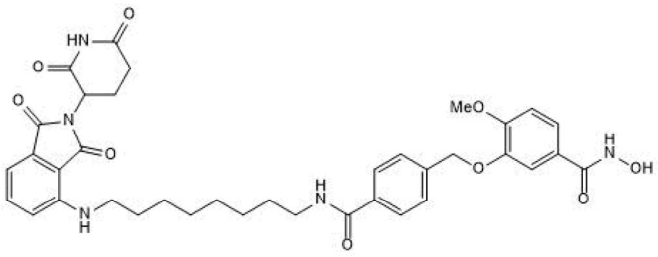
Batch Molecular Weight: 731.28

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 97.5% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	59.86	6.09	9.51
Found	60.77	6.13	9.58

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Description:

CT-4 is a potent and selective histone deacetylase 8 (HDAC8) degrader (PROTAC®) (DC_{50} = 1.8 nM after 24 h, D_{max} 97%). Comprises a HDAC8-binding moiety joined by a linker to pomalidomide as the ligand for cereblon (CRBN) protein. Displays 20-fold selectivity over HDAC6 (DC_{50} = 38 nM after 24 h, D_{max} 69%) and it does not degrade other HDACs. Displays significant effect on metastasis of MDA-MB-231 cells, and induces degradation and cell death in T-cell leukemia Jurkat cells. Outperformed HDAC8 inhibitors in oncology models. HDAC8 mediates signalling via scaffolding functions in HDAC8/p53/fusion protein complexes, also interacts with STAT3, ... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

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Physical Appearance: Yellow solid

Minimum Purity: ≥98%

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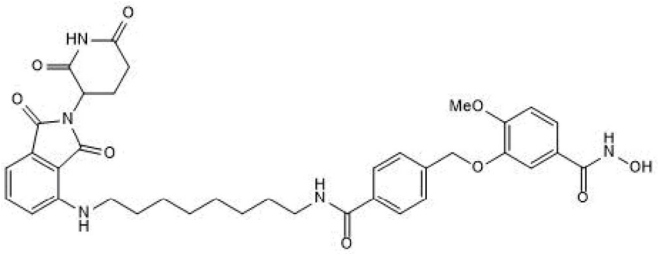

Storage: Store at -20°C

Solubility & Usage Info:

DMSO 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:

Zhao *et al* (2023) Discovery of highly potent HDAC8 PROTACs with anti-tumor activity. Bioorg.Chem. ***136***. PMID: 37098288.

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