PRODUCT INFORMATION C527



Item No. 21771

CAS Registry No.:	192718-06-2	
Formal Name:	2-(4-fluorophenyl)-naphth[2,3-d]oxazole-4,9-dione	
MF:	C ₁₇ H ₈ FNO ₃	0
FW:	293.3	
Purity:	≥98%	F
UV/Vis.:	λ _{max} : 277 nm	
Supplied as:	A crystalline solid	 0
Storage:	-20°C	
Stability:	≥4 years	

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

Laboratory Procedures

C527 is supplied as a crystalline solid. A stock solution may be made by dissolving the C527 in the solvent of choice, which should be purged with an inert gas. C527 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of C527 in these solvents is approximately 0.16 and 0.33 mg/ml, respectively.

Description

C527 is an inhibitor of USP1/UAF complex deubiquitinase activity (IC₅₀ = 0.88 μ M).¹ It also inhibits USP5, UCL-H3, and USP12/46 but not UCL-H1 activity (IC₅₀s = 1.65, 2.18, 5.97, and >10 μ M, respectively). C527 increases ubiquinated Fanconi anemia complementation group D2 (FANCD2-Ub) and FANCI-Ub levels in a concentration-dependent manner. It inhibits homologous recombination repair, cell proliferation, and sensitizes HeLa cells to the DNA crosslinker mitomycin C (Item No. 11435). C527 also inhibits proliferation of PC3 and LNCap prostate cancer cells (IC_{50} s = 0.24 and 0.03 μ M, respectively, after 72 hours).²

References

- 1. Mistry, H., Hsieh, G., Buhrlage, S.J., et al. Small-molecule inhibitors of USP1 target ID1 degradation in leukemic cells. Mol. Cancer Ther. 12(12), 2651-2662 (2013).
- 2. Brandy, Y., Ononiwu, I., Adedeji, D., et al. Synthesis and cytotoxic activities of some 2-arylnaphtho[2,3-d] oxazole-4,9-dione derivatives on androgen-dependent (LNCaP) and androgen-independent (PC3) human prostate cancer cell lines. Invest New Drugs 30(4), 1709-1714 (2012).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/14/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM