Print Date: Apr 11th 2019

Certificate of Analysis

www.tocris.com

Product Name: **LNT 1** **Catalog No.: 6510** **Batch No.: 1**

CAS Number: 824983-91-7

IUPAC Name: 1-[(2,3-Dihydro-1,4-benzodioxin-2-yl)methyl]-3-hydroxythieno[3,2-*d*]pyrimidine-2,4(1*H*,3*H*)-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{12}N_2O_5S$

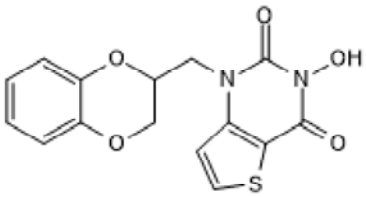
Batch Molecular Weight: 332.33

Physical Appearance: Beige solid

Solubility: DMSO to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Dichloromethane:Methanol [9:1])

HPLC: Shows 99.4% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	54.21	3.64	8.43
Found	54.24	3.62	8.29

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **LNT 1** **Catalog No.: 6510** **Batch No.: 1**

CAS Number: 824983-91-7

IUPAC Name: 1-[(2,3-Dihydro-1,4-benzodioxin-2-yl)methyl]-3-hydroxythieno[3,2-*d*]pyrimidine-2,4(1*H*,3*H*)-dione

Description:

Potent flap endonuclease 1 (FEN1) inhibitor (IC_{50} = 46.4 nM for hFEN1-336Δ). Cytotoxic to SW620 colorectal cancer cells in vitro; induces DNA damage response.

Physical and Chemical Properties:

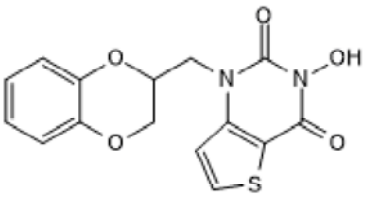
Batch Molecular Formula: $C_{15}H_{12}N_2O_5S$

Batch Molecular Weight: 332.33

Physical Appearance: Beige solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 50 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. Our standard recommendations are:

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:

Ward *et al* (2017) Small molecule inhibitors uncover synthetic genetic interactions of human flap endonuclease 1 (FEN1) with DNA damage response genes. PLoS One ***12*** e0179278. PMID: 28628639.

Exell *et al* (2016) Cellularly active N-hydroxyurea FEN1 inhibitors block substrate entry to the active site. Nat.Chem.Bio. ***12*** 815. PMID: 27526030.