

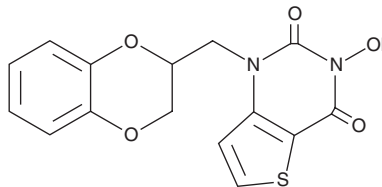
# PRODUCT INFORMATION



## LNT 1

Item No. 35803

**CAS Registry No.:** 824983-91-7  
**Formal Name:** 1-[(2,3-dihydro-1,4-benzodioxin-2-yl)methyl]-3-hydroxy-thieno[3,2-d]pyrimidine-2,4(1H,3H)-dione  
**MF:** C<sub>15</sub>H<sub>12</sub>N<sub>2</sub>O<sub>5</sub>S  
**FW:** 332.3  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

LNT 1 is supplied as a solid. A stock solution may be made by dissolving the LNT 1 in the solvent of choice, which should be purged with an inert gas. LNT 1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of LNT 1 in these solvents is approximately 4, 10, and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of LNT 1 can be prepared by directly dissolving the solid in aqueous buffers. The solubility of LNT 1 in PBS (pH 7.2) is approximately 0.11 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

LNT 1 is an inhibitor of flap endonuclease 1 (FEN1; IC<sub>50</sub> = 0.011 μM).<sup>1</sup> It is selective for FEN1 over xeroderma pigmentosum G (IC<sub>50</sub> = 0.292 μM). LNT 1 (3 and 6 μM) enhances methyl methanesulfonate-induced DNA damage and cell death in T24 bladder cancer cells.

### Reference

1. Tumey, N., Bom, D., Huck, B., *et al.* The identification and optimization of a N-hydroxy urea series of flap endonuclease 1 inhibitors. *Bioorg. Med. Chem. Lett.* **15**(2), 277-281 (2005).

#### 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.

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