

# **Certificate of Analysis**

Print Date: Sep 16th 2025

www.tocris.com

Product Name: LTURM 34 Catalog No.: 5834 Batch No.: 2

CAS Number: 1879887-96-3

IUPAC Name: 8-(4-Dibenzothienyll)-2-(4-morpholinyl)-4*H*-1,3-benzoxazin-4-one

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{24}H_{18}N_2O_3S$ .

Batch Molecular Weight: 414.48

Physical Appearance: Off White solid
Solubility: DMSO to 50 mM
Storage: Store at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**HPLC:** Shows 99.5% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 69.55 4.38 6.76 Found 69.09 4.36 6.61

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



# **Product Information**

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# **Description:**

LTURM 34 is a potent DNA-PK inhibitor ( $IC_{50} = 34$  nM). Exhibits 170-fold selectivity for DNA-PK over PI3-K. Attenuates proliferation of a wide range of tumor cell lines in vitro. LTURM 34 also increases CRISPR-Cas9 deletion efficiency.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>24</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>S.

Batch Molecular Weight: 414.48 Physical Appearance: Off White solid

Minimum Purity: ≥98%

#### **Batch Molecular Structure:**

Storage: Store at +4°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. \*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:

Bosch-Guiteras et al (2021) Enhancing CRISPR deletion via pharmacological delay of DNA-PKcs. Genome Res. 31 461. PMID: 33574136.

Morrison et al (2016) Synthesis, structure elucidation, DNA-PK and PI3K and anti-cancer activity of 8- and 6-aryl-substituted-1-3-benzoxazines. Eur.J.Med.Chem. 110 326. PMID: 26854431.

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