

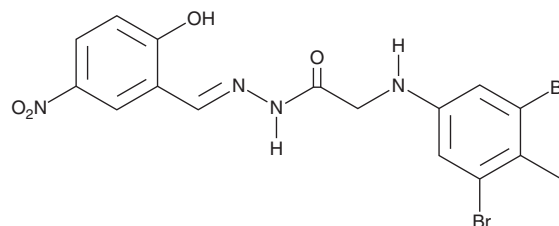
PRODUCT INFORMATION



L67

Item No. 22941

CAS Registry No.: 325970-71-6
Formal Name: N-(3,5-dibromo-4-methylphenyl)-glycine,
2-[(2-hydroxy-5-nitrophenyl)methylene]hydrazide
MF: C₁₆H₁₄Br₂N₄O₄
FW: 486.1
Purity: ≥98%
UV/Vis.: λ_{max}: 217, 280 nm
Supplied as: A crystalline 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

L67 is supplied as a crystalline solid. A stock solution may be made by dissolving the L67 in the solvent of choice. L67 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of L67 in these solvents is approximately 10 mg/ml.

Description

L67 is a competitive inhibitor of DNA ligases I and III (IC₅₀s = 10 and 10 μM for human DNA ligase I and human ligase IIIβ).¹ It blocks DNA binding (K_i = 10 μM), increasing the cytotoxicity of DNA-damaging agents. It also inhibits mitochondrial DNA ligase IIIα and induces the production of reactive oxygen species (ROS) and apoptosis in cancerous, but not non-malignant, cells.² It does not inhibit DNA ligase IV or T4 DNA ligase at concentrations up to 100 μM.¹

References

1. Chen, X., Zhong, S., Zhu, X., *et al.* Rational design of human DNA ligase inhibitors that target cellular DNA replication and repair. *Cancer Res.* **68(9)**, 3169-3177 (2008).
2. Sallmyr, A., Matsumoto, Y., Roginskaya, V., *et al.* Inhibiting mitochondrial DNA ligase IIIα activates caspase 1-dependent apoptosis in cancer cells. *Cancer Res.* **76(18)**, 5431-5441 (2016).

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

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