

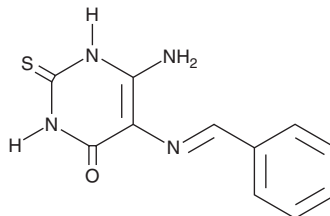
PRODUCT INFORMATION



L189

Item No. 18374

CAS Registry No.: 64232-83-3
Formal Name: 6-amino-2,3-dihydro-5-
[(phenylmethylene)amino]-2-
thioxo-4(1H)-pyrimidinone
MF: C₁₁H₁₀N₄OS
FW: 246.3
Purity: ≥95%
UV/Vis.: λ_{max}: 222, 294, 360, 378 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

L189 is supplied as a crystalline solid. A stock solution may be made by dissolving the L189 in the solvent of choice, which should be purged with an inert gas. L189 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of L189 in these solvents is approximately 0.3, 10, and 20 mg/ml, respectively.

L189 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, L189 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. L189 has a solubility of approximately 0.5 mg/l in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

L189 is a competitive inhibitor of DNA ligases I, III, and IV (IC₅₀s = 5, 9, and 5 μM, respectively).¹ It blocks DNA binding (K_i = 5 μM for DNA ligase I), increasing the cytotoxicity of DNA-damaging agents, including ionizing radiation.¹ L189 preferentially inhibits the interaction of the ligase with damaged DNA, inhibiting base excision repair and non-homologous end-joining.

Reference

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).

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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