

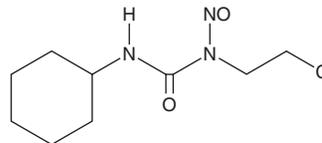
PRODUCT INFORMATION



Lomustine

Item No. 21237

CAS Registry No.: 13010-47-4
Formal Name: N-(2-chloroethyl)-N'-cyclohexyl-N-nitroso-urea
Synonyms: CCNU, NCI C04740, NSC 79037
MF: C₉H₁₆ClN₃O₂
FW: 233.7
Purity: ≥98%
UV/Vis.: λ_{max}: 230 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

Lomustine is supplied as a crystalline solid. A stock solution may be made by dissolving the lomustine in the solvent of choice, which should be purged with an inert gas. Lomustine is soluble in organic solvents such as ethanol and DMSO. It is also soluble in water. The solubility of lomustine in ethanol and DMSO is approximately 100 mM and approximately 25 mM in water. We do not recommend storing the aqueous solution for more than one day.

Description

Lomustine is a nitrosourea DNA alkylating agent that forms DNA interstrand crosslinks and strand breaks.^{1,2} It reduces tumor volume in a melanoma mouse xenograft model when administered at doses ranging from 4 to 16 mg/kg.³ Formulations containing lomustine have been used in the treatment of various cancers in human and veterinary medicine.

References

1. Kohn, K.W. Interstrand cross-linking of DNA by 1,3-bis(2-chloroethyl)-1-nitrosourea and other 1-(2-haloethyl)-1-nitrosoureas. *Cancer Res.* **37(5)**, 1450-1454 (1977).
2. Siddik, Z.H. Mechanisms of action of cancer chemotherapeutic agents: DNA-interactive alkylating agents and antitumour platinum-based drugs. *The Cancer Handbook 1st Edition* (2005).
3. Osieka, R., Glatte, P., Pannenbäcker, R., et al. Therapeutic evaluation of five nitrosoureas in a human melanoma xenograft system. *Cancer Chemother. Pharmacol.* **11(3)**, 147-152 (1983).

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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