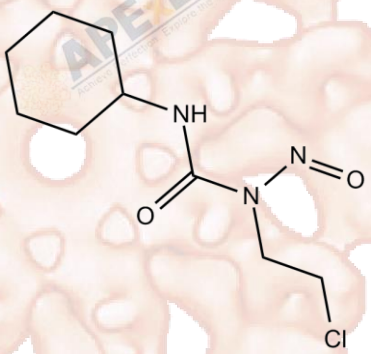
Product Data Sheet

Lomustine



Cat. No.: B1963

CAS No.: 13010-47-4

Formula: C9H16ClN3O2

M.Wt: 233.7

Synonyms:

Target: DNA Damage/DNA Repair

Pathway: DNA Alkylating

Storage: Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾23.41 mg/mL in DMSO; ⩾23.9 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	4.2790 mL	21.3950 mL	42.7899 mL
5 mM	0.8558 mL	4.2790 mL	8.5580 mL
10 mM	0.4279 mL	2.1395 mL	4.2790 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Antineoplastic drug
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	L1210 leukemia cells
Preparation method:	The solubility of this compound in DMSO is >11.7mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	50 μg/ml, 37°C

	Applications:	In L1210 leukemia cells, the radioactivity of the cyclohexyl moiety of CCNU (Lomustine) was bound almost exclusively to proteins, and that of the ethylene group was bound (at a much lower level) to both nucleic acids and proteins.
In Vivo	**Animal experiment**	
	Animal models:	L1210 leukemia-bearing mice
	Dosage form:	0.5 mg in 0.2 ml of dimethyl sulfoxide; i.p. injection
	Applications:	In L1210 leukemia-bearing mice, the radioactivity of the cyclohexyl moiety of CCNU (Lomustine) was almost exclusively bound to cellular proteins, rather than to nucleic acids. The radioactivity of the ethylene moiety was bound to both nucleic acids and proteins of brain, liver, and leukemia cells to about the same level.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1] Cheng CJ, Fujimura S, Grunberger D, Weinstein IB. Interaction of 1-(2-chloroethyl)-3-cyclohexyl-1-nitrosourea (NSC 79037) with nucleic acids and proteins in vivo and in vitro. Cancer Res. 1972 Jan;32(1):22-7.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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