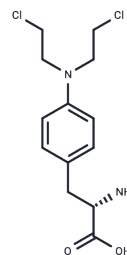


Melphalan

Chemical Properties

CAS No. :	148-82-3
Formula:	C ₁₃ H ₁₈ Cl ₂ N ₂ O ₂
Molecular Weight:	305.21
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Melphalan is an orally bioavailable DNA alkylating agent exhibiting antitumour activity, commonly employed in cancer chemotherapy.
Targets(IC50)	DNA Alkylation
In vivo	In SD rats, high-temperature treatment affects the pharmacokinetics of intraperitoneally administered Melphalan (12 mg/kg): it reduces the area under the curve (AUC) of melphalan in the peritoneal fluid and does not increase the AUC of melphalan in plasma. Meanwhile, high-temperature treatment can elevate the concentration of melphalan in intraperitoneal tissues.

Solubility Information

Solubility	H ₂ O: 3.1 mg/mL (10.16 mM), when pH is adjusted to 2 with HCl. DMSO: 4 mg/mL (13.11 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2764 mL	16.3822 mL	32.7643 mL
5 mM	0.6553 mL	3.2764 mL	6.5529 mL
10 mM	0.3276 mL	1.6382 mL	3.2764 mL
50 mM	0.0655 mL	0.3276 mL	0.6553 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Glehen O, et al. Hyperthermia modifies pharmacokinetics and tissue distribution of intraperitoneal melphalan in a rat model. *Cancer Chemother Pharmacol.* 2004 Jul;54(1):79-84.

Rothbarth J, et al. Immunohistochemical detection of melphalan-DNA adducts in colon cancer cells in vitro and human colorectal liver tumours in vivo. *Biochem Pharmacol.* 2004 May 1;67(9):1771-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481