Data Sheet (Cat.No.T40478)

TargetMol
YOUR TARGET MOLECULES

Melflufen hydrochloride

Chemical Properties

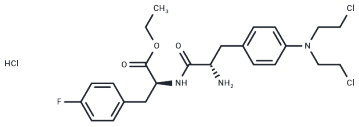
CAS No. : 380449-54-7

Formula: C24H31Cl3FN3O3

Molecular Weight: 534.88

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Melflufen (Melphalan flufenamide) hydrochloride, an alkylating agent and dipeptide prodrug of Melphalan, exhibits antitumor activity by inducing irreversible DNA damage and cytotoxicity in multiple myeloma (MM) cells, while also inhibiting angiogenesis.
In vitro	Melflufen (Melphalan flufenamide) hydrochloride (0.5-10 μM; 24 hours) decreases viability of MM.1S, INA-6, RPMI-8226, MM.1R, Dox-40, ARP-1, and ANBL-6 cells in a concentration-dependent manner[1]. Melflufen hydrochloride induces apoptosis in MM.1S cells[1]. Melflufen hydrochloride also is a potent activator of exosome secretion[3]. Cell Viability Assay[1]Cell Line: Multiple myeloma cells: MM.1S, INA-6, RPMI-8226, MM.1R, Dox-40, ARP-1, ANBL-6 cells Concentration: 0.5, 1, 3, 5, 10 μM Incubation Time: 24 hours Result: A significant concentration-dependent decrease in viability of all cell lines was observed.
In vivo	Melflufen (Melphalan flufenamide) hydrochloride, administered intravenously at a dosage of 3 mg/kg twice weekly for two weeks, demonstrates significant anti-multiple myeloma (MM) activity in a human plasmacytoma MM.1S xenograft mouse model using CB-17 SCID mice. This treatment notably inhibited MM tumor growth and extended the survival of the mice.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8696 mL	9.3479 mL	18.6958 mL
5 mM	0.3739 mL	1.8696 mL	3.7392 mL
10 mM	0.187 mL	0.9348 mL	1.8696 mL
50 mM	0.0374 mL	0.187 mL	0.3739 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.

Reference

Chauhan D, et al. In vitro and in vivo antitumor activity of a novel alkylating agent, melphalan-flufenamide, against multiple myeloma cells. Clin Cancer Res. 2013;19(11):3019-3031.

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481