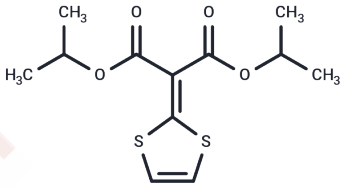
Data Sheet (Cat.No.T6576)

TargetMol

Malotilate

Chemical Properties



CAS No. : 59937-28-9

Formula: C12H16O4S2

Molecular Weight: 288.38

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Malotilate (Kantec) is a medicine used for the therapy of liver cirrhosis.
Targets(IC50)	Lipoxygenase
In vitro	Malotilate caused a significant decrease in the invasion of C-SST-2 cells in RLE monolayers.Malotilate inhibited the increased permeability of RLE monolayers by serum starvation. By enhancing the intercellular contact of endothelial cells, Malotilate prevented the invasion of tumor cells into the vascular endothelium and inhibited tumor metastasis. In multilayer cultures, Malotilate (0.1-100 μM) concentration-dependently increased collagenase activity but did not affect monolayer cells. In damaged multilayer cultures, Malotilate increased MMP-1 and MMP-3 secretion, also without affecting monolayer cells.
In vivo	Malotilate caused a significant decrease in the invasion of C-SST-2 cells in RLE monolayers.Malotilate inhibited the increased permeability of RLE monolayers by serum starvation. By enhancing the intercellular contact of endothelial cells, Malotilate prevented the invasion of tumor cells into the vascular endothelium and inhibited tumor metastasis. In multilayer cultures, Malotilate (0.1-100 μM) concentration-dependently increased collagenase activity but did not affect monolayer cells. In damaged multilayer cultures, Malotilate increased MMP-1 and MMP-3 secretion, also without affecting monolayer cells.

Solubility Information

Solubility	Ethanol: 58 mg/mL (201.12 mM),Sonication is recommended. DMSO: 55 mg/mL (190.72 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.94 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4676 mL	17.3382 mL	34.6765 mL
5 mM	0.6935 mL	3.4676 mL	6.9353 mL
10 mM	0.3468 mL	1.7338 mL	3.4676 mL
50 mM	0.0694 mL	0.3468 mL	0.6935 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

Ohgoda O, et al. J Dermatol Sci, 1998, 17(2), 123-131.
Nagayasu H, et al. Br J Cancer, 1998, 77(9), 1371-1377.
Ryhanen L, et al. J Hepatol, 1996, 24(2), 238-245.
Ala-Kokko L, et al. Biochem J, 1987, 246(2), 503-509.
Kim SG, et al. Biochem Biophys Res Commun, 1994, 200(3), 1414-1420.