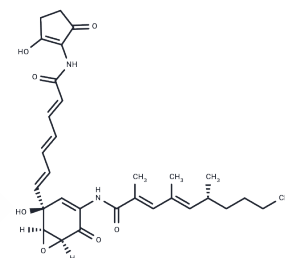


Manumycin A

Chemical Properties

CAS No. :	52665-74-4
Formula:	C ₃₁ H ₃₈ N ₂ O ₇
Molecular Weight:	550.64
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Manumycin A is an antibiotic with anticancer activity and is a mammalian thioredoxin reductase-1 (TrxR-1) inhibitor. Manumycin A inhibits the production of IL-1 β , IL-6, and IL-8 in TNF alpha-stimulated THP-1 cells and peripheral blood mononuclear cells in a dose-dependent manner, inducing apoptosis.
Targets(IC50)	Apoptosis, Reductase, Antibiotic, Phospholipase, TNF, Transferase, ATG, Ras

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8161 mL	9.0803 mL	18.1607 mL
5 mM	0.3632 mL	1.8161 mL	3.6321 mL
10 mM	0.1816 mL	0.908 mL	1.8161 mL
50 mM	0.0363 mL	0.1816 mL	0.3632 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

Hara M, et al. Identification of Ras farnesyltransferase inhibitors by microbial screening. Proc Natl Acad Sci U S A. 1993 Mar 15;90(6):2281-5.

Bernier M, et al. Binding of manumycin A inhibits I κ B kinase beta activity. J Biol Chem. 2006 Feb 3;281(5):2551-61.

Kim KH, et al. Manumycin A induces apoptosis in malignant pleural mesothelioma through regulation of Sp1 and activation of the mitochondria-related apoptotic pathway. Oncol Rep. 2016 Jul;36(1):117-24.

Datta, A. et al. Manumycin A suppresses exosome biogenesis and secretion via targeted inhibition of Ras/Raf/ERK1/2 signaling and hnRNP H1 in Castration resistant prostate cancer cells. Cancer Let. 408, 73-81 (2017).

Zhang H, et al. Advances in the discovery of exosome inhibitors in cancer. J Enzyme Inhib Med Chem. 2020;35(1):1322-1330.

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