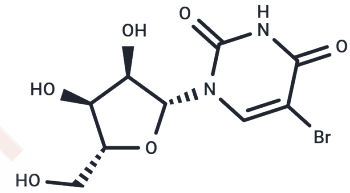


5-Bromouridine

Chemical Properties

CAS No. :	957-75-5
Formula:	C ₉ H ₁₁ BrN ₂ O ₆
Molecular Weight:	323.1
Storage:	Store at low temperature 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	5-Bromouridine is a uracil derivative with a broad spectrum of antitumor activity that induces apoptosis in cancer cells by inhibiting DNA synthesis. 5-Bromouridine is also used as a marker for DNA and RNA, where the molecule is labeled with a radioisotope or pigment after being introduced into a DNA or RNA strand.
Targets(IC50)	Nucleoside Antimetabolite/Analog, DNA/RNA Synthesis

Solubility Information

Solubility	H ₂ O: 80 mg/mL (247.6 mM), Sonication is recommended. PBS (pH 7.2): 2 mg/mL (6.19 mM), Sonication is recommended. DMSO: 80 mg/mL (247.6 mM), Sonication is recommended. DMF: 8 mg/mL (24.76 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (10.21 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.095 mL	15.4751 mL	30.9502 mL
5 mM	0.619 mL	3.095 mL	6.190 mL
10 mM	0.3095 mL	1.5475 mL	3.095 mL
50 mM	0.0619 mL	0.3095 mL	0.619 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

- Tanner, N.K., et al. Binding interactions between yeast tRNA ligase and a precursor transfer ribonucleic acid containing two photoreactive uridine analogues *Biochemistry* 27(24)8852-8861(1988)
- Li, X., Patel, R., Melamed, M.R., et al. The cell cycle effects and induction of apoptosis by 5-bromouridine in cultures of human leukaemic MOLT-4 and HL-60 cell lines and mitogen-stimulated normal lymphocytes *Cell Prolif.* 27(6)307-319(1994)
- Gott, J.M., Willis, M.C., Koch, T.H., et al. A specific, UV-induced RNA-protein cross-link using 5-bromouridine-substituted RNA *Biochemistry* 30(25)6290-6295(1991)
- Robak T, Robak P. Purine nucleoside analogs in the treatment of rarer chronic lymphoid leukemias. *Curr Pharm Des.* 2012;18(23):3373-88.

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