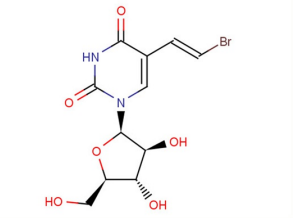
Data Sheet (Cat.No.T16911)

TargetMol
A DRUG SCREENING EXPERT

Sorivudine

Chemical Properties



CAS No.:	77181-69-2
Formula:	C11H13BrN2O6
Molecular Weight:	349.13
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Sorivudine is an orally active synthetic pyrimidine nucleoside antimetabolite drug. Sorivudine derives its antiviral activity from selective conversion by a specific thymidine kinase present in certain DNA viruses to nucleotides.
Targets(IC_{50})	Others: None
In vitro	Sorivudine inhibits strains of HSV-1 and HSV-2 (ID50s (50% inhibitory dose): 0.39 and 0.67 μM, respectively). Sorivudine has antiviral activity against several viruses including varicella-zoster virus, herpes simplex type 1 virus, and Epstein-Barr virus. Sorivudine has in vitro inhibitory activity against the varicella-zoster virus at concentrations of 00001-0.004 mg/ml. These concentrations are over 1000-fold lower than those which are required for the inhibition of VZV replication by acyclovir 3 Sorivudine also inhibits HSV-I replication at concentrations ranging from 0.03-0.1 mg/ml [1][2].
In vivo	Sorivudine has been evaluated in the treatment of HSV-I encephalitis when administered orally to mice. The survival of treated mice is prolonged at dosages in excess of 12.5 mg/kg. A significant decrease in mortality was achieved as well with doses in excess of 50 mg/kg. Sorivudine therapy at dosages as low as 20 mg/kg per day given intramuscularly or 100 mg/kg per day administered orally completely protected against viremia and mortality. There was no evidence of neurotoxicity or abnormalities in hematology or clinical chemistries. Doses as low as 0.2 mg/kg per day were effective; however, breakthrough viremia was noted at lower dosages [2].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.864 mL	14.321 mL	28.643 mL
5 mM	0.573 mL	2.864 mL	5.729 mL
10 mM	0.286 mL	1.432 mL	2.864 mL
50 mM	0.057 mL	0.286 mL	0.573 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Diasio RB, et al. Sorivudine and 5-fluorouracil; a clinically significant drug-drug interaction due to inhibition of dihydropyrimidine dehydrogenase. Br J Clin Pharmacol. 1998 Jul;46(1):1-4.
2. Whitley RJ, et al. Sorivudine: a potent inhibitor of varicella zoster virus replication.Adv Exp Med Biol. 1996;394:41-4.

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