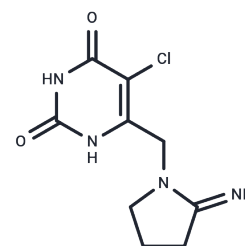


Tipiracil

Chemical Properties

CAS No. :	183204-74-2
Formula:	C ₉ H ₁₁ ClN ₄ O ₂
Molecular Weight:	242.66
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	Tipiracil is a pharmacological agent that inhibits the enzyme thymidine phosphorylase. Tipiracil is under research for combination effect with trifluridine in advanced or metastatic colorectal and gastric cancers. By inhibiting thymidine phosphorylase, Tipiracil enhances the bioavailability and efficacy of trifluridine, offering alternative in cancer research.
Targets(IC50)	Nucleoside Antimetabolite/Analog,Others,DNA/RNA Synthesis
In vitro	Tipiracil functions as a thymidine phosphorylase inhibitor, enhancing trifluridine's efficacy by impeding its metabolism via thymidine phosphorylase. This synergistic action facilitates the use of the Trifluridine-Tipiracil combination as an innovative oral treatment for metastatic colorectal cancer [2]. Additionally, Tipiracil fortifies the stability of FTD by mitigating its first-pass degradation through its inhibitory action on thymidine phosphorylase [3].

Solubility Information

Solubility	H ₂ O: 0.8 mg/mL (3.3 mM),Sonication is recommended. DMSO: < 1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.121 mL	20.605 mL	41.2099 mL
5 mM	0.8242 mL	4.121 mL	8.242 mL
10 mM	0.4121 mL	2.0605 mL	4.121 mL
50 mM	0.0824 mL	0.4121 mL	0.8242 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

- Lee SJ, et al. Thymidine phosphorylase influences [(18)F]fluorothymidine uptake in cancer cells and patients with non-small cell lung cancer. *Eur J Nucl Med Mol Imaging*. 2014 Jul;41(7):1327-35.
- Raedler LA. Lonsurf (Trifluridine plus Tipiracil): A New Oral Treatment Approved for Patients with Metastatic Colorectal Cancer. *Am Health Drug Benefits*. 2016 Mar;9(Spec Feature):97-100.
- Tanaka N, et al. Repeated oral dosing of TAS-102 confers high trifluridine incorporation into DNA and sustained antitumor activity in mouse models. *Oncol Rep*. 2014 Dec;32(6):2319-26.

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